

CommScope Holding Company, Inc.

Form 424B3

September 22, 2016

Table of Contents

Filed pursuant to Rule 424(b)(3)
Registration No. 333-202490

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee(2)
		Per Share(1)		
Common stock, \$0.01 par value	11,500,000	\$30.00	\$345,000,000.00	\$34,741.50(1)

- (1) Estimated pursuant to Rule 457(c). The offering price and registration fee are based on the average of the high and low prices for our common stock on September 15, 2016 as reported on the NASDAQ Global Select Market.
- (2) Calculated in accordance with Rule 457(r) and relates to the registration statement on Form S-3 (File No. 333-202490) filed on March 4, 2015.

Table of Contents

Prospectus supplement

(To Prospectus dated March 4, 2015)

10,000,000 shares

CommScope Holding Company, Inc.

Common stock

This prospectus relates to the shares of common stock of CommScope Holding Company, Inc. being sold by an affiliate of The Carlyle Group ("Carlyle" or the "selling stockholder"). We will not receive any proceeds from the sale of our common stock by the selling stockholder.

You should carefully read this prospectus supplement and the accompanying prospectus, together with the documents we incorporate by reference, before you invest in our common stock.

INVESTING IN OUR COMMON STOCK INVOLVES RISKS. SEE THE RISK FACTORS ON PAGE S-4 OF THIS PROSPECTUS SUPPLEMENT AND PAGE 5 OF THE ACCOMPANYING PROSPECTUS.

Our common stock is listed on the Nasdaq Global Select Market ("Nasdaq") under the symbol COMM. On September 20, 2016, the last reported sale price of our common stock on Nasdaq was \$30.83 per share.

The underwriter has agreed to purchase the shares from the selling stockholder at the price of \$30.37 per share, resulting in aggregate proceeds of \$303,700,000 to the selling stockholder (or \$349,255,000 if the underwriter fully exercises its option to purchase additional shares). The shares may be offered by the underwriter from time to time to purchasers directly or through agents, or through brokers in brokerage transactions on the Nasdaq Global Select Market, or to dealers in negotiated transactions or in a combination of such methods of sale, at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. See "Underwriting."

The underwriter may also purchase up to an additional 1,500,000 shares from the selling stockholder, at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

Delivery of the shares of common stock is expected on or about September 26, 2016.

Credit Suisse

The date of this prospectus supplement is September 20, 2016.

Table of Contents

TABLE OF CONTENTS
PROSPECTUS SUPPLEMENT

<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	S-1
<u>PROSPECTUS SUPPLEMENT SUMMARY</u>	S-2
<u>RISK FACTORS</u>	S-4
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION</u>	S-5
<u>USE OF PROCEEDS</u>	S-7
<u>SELLING STOCKHOLDER</u>	S-8
<u>MATERIAL U.S. FEDERAL TAX CONSIDERATIONS FOR NON-U.S. HOLDERS</u>	S-9
<u>UNDERWRITING</u>	S-13
<u>LEGAL MATTERS</u>	S-19
<u>EXPERTS</u>	S-19
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	S-19
<u>INCORPORATION BY REFERENCE</u>	S-20

PROSPECTUS

<u>ABOUT THIS PROSPECTUS</u>	1
<u>CERTAIN TRADEMARKS</u>	1
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	1
<u>INCORPORATION BY REFERENCE</u>	2
<u>THE COMPANY</u>	4
<u>RISK FACTORS</u>	5
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION</u>	7
<u>USE OF PROCEEDS</u>	9
<u>DESCRIPTION OF CAPITAL STOCK</u>	10
<u>PLAN OF DISTRIBUTION</u>	15
<u>LEGAL MATTERS</u>	19
<u>EXPERTS</u>	19

You should rely only on the information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus prepared by or on behalf of us. We and the selling stockholder have not, and the underwriter has not, authorized any other person to

provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. The selling stockholder is not, and the underwriter is not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. The information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any related free writing prospectus prepared by or on behalf of us is accurate only as of the date of the applicable document. Our business, financial condition, results of operations and prospects may have changed since that date.

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document has two parts, a prospectus supplement and an accompanying prospectus dated March 4, 2015. This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the "SEC"), utilizing a shelf registration process. Under this shelf registration process, the selling stockholder named in a prospectus supplement may, from time to time, offer and sell our common stock in one or more offerings or resales.

The accompanying prospectus provides you with a general description of our common stock, which the selling stockholder may offer pursuant to this prospectus supplement. This prospectus supplement, which describes certain matters relating to us and the specific terms of this offering of shares of our common stock, adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference herein. Any statement that we make in the accompanying prospectus will be modified or superseded by any inconsistent statement made by us in this prospectus supplement.

The rules of the SEC allow us to incorporate by reference information into this prospectus supplement. This information incorporated by reference is considered to be a part of this prospectus supplement, and information that we file later with the SEC, to the extent incorporated by reference, will automatically update and supersede this information. See "Incorporation by Reference." You should read both this prospectus supplement and the accompanying prospectus together with additional information described under the heading "Where You Can Find More Information" before investing in our common stock.

We are responsible for the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any related free-writing prospectus we prepare or authorize. Neither we, the underwriter nor the selling stockholder has authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus supplement or the accompanying prospectus. This prospectus supplement and the accompanying prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus supplement and the accompanying prospectus or any free writing prospectus prepared by us is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus supplement and the accompanying prospectus is delivered or securities are sold on a later date. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless otherwise noted in this prospectus supplement, the term "CommScope Holdings" means CommScope Holding Company, Inc. When we refer to "CommScope," "we," "our," "us" and the "Company" in this prospectus supplement, we mean CommScope Holdings and its direct and indirect subsidiaries on a consolidated basis, unless otherwise specified.

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights important features of this offering and the information included or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary does not contain all of the information that you should consider before investing in our common stock. You should read carefully the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference, especially the risks of investing in our common stock discussed under Risk Factors. References to BNS or the BNS business refer to the Broadband Network Solutions business of TE Connectivity LTD. (TE Connectivity), which we acquired (the Acquisition) on August 28, 2015 in an all-cash transaction.

Company Overview

We are a leading global provider of essential infrastructure solutions for communication networks. We help companies around the world design, build and manage their wired and wireless networks. Our portfolio of network infrastructure includes some of the world's most robust and innovative wireless and fiber optic solutions. Our talented and experienced global team is driven to help customers increase bandwidth; maximize existing capacity; improve network performance, latency and availability; increase energy efficiency; and simplify technology migration.

Our solutions are found in some of the largest buildings, venues and outdoor spaces; in data centers and buildings of all shapes, sizes and complexities; at wireless cell sites; in telecom central offices and cable headends; in fiber-to-the-X (FTTx) deployments; and in airports, trains, and tunnels. Vital networks around the world run on CommScope solutions.

We have a team of approximately 23,000 people to serve our customers in over 100 countries through a network of more than 30 world-class manufacturing and distribution facilities strategically located around the globe. Our customers include substantially all of the leading global telecommunication operators as well as thousands of enterprise customers, including many Fortune 500 enterprises, and leading cable operators.

We have long-standing, direct relationships with our customers and serve them through a direct sales force and a global network of channel partners. Our solutions and services for wired and wireless networks enable high-bandwidth data, video and voice applications. Our global leadership position is built upon innovative technology, broad solution offerings, high-quality and cost-effective customer solutions and global manufacturing and distribution scale.

The transformational BNS acquisition broadened our leading position across diverse and growing markets, significantly expanded our platform for innovative solutions and created complementary market opportunities. It also provided an opportunity for significant synergies.

For the year ended December 31, 2015, our revenues were \$3.81 billion and our net loss was \$70.9 million, which included \$96.9 million of transaction and integration costs, \$90.8 million of asset impairment charges and \$81.7 million in charges related to purchase accounting.

In January 2011, Carlyle completed the acquisition of CommScope, Inc., our predecessor. Under the terms of the acquisition, CommScope, Inc. became a wholly-owned subsidiary of CommScope Holdings.

CommScope Holding Company, Inc. was incorporated in Delaware on October 22, 2010. Our principal executive offices are located at 1100 CommScope Place, SE, Hickory, NC 28602 and our telephone number is (828) 324-2200. Our internet address is www.commscope.com. The contents of our website are not part of this prospectus.

S-2

Table of Contents

The Offering

Common Stock Offered by the Selling Stockholder 10,000,000 shares

Common Stock to be Outstanding After this Offering 192,618,113 shares(1)

Option to Purchase Additional Shares The selling stockholder has granted the underwriter a 30-day option to purchase up to an additional 1,500,000 shares of our common stock at the public offering price.

Selling Stockholder The selling stockholder in this offering is an affiliate of Carlyle. See Selling Stockholder.

Use of Proceeds We will not receive any proceeds from the sale of any shares of our common stock offered by the selling stockholder.

Risk Factors See Risk Factors on page S-4 of this prospectus supplement and other information included in or incorporated by reference in this prospectus supplement and the accompanying prospectus, including the section entitled Risk Factors beginning on page 20 of our annual report on Form 10-K for the year ended December 31, 2015 filed with the SEC on February 19, 2016 for a discussion of factors you should carefully consider before deciding to invest in our common stock.

Nasdaq Symbol COMM

(1) Based on the number of shares outstanding as of June 30, 2016, which includes 10,000,000 shares to be sold by the selling stockholder (or 11,500,000 shares if the underwriter fully exercises its option to purchase additional shares) and excludes

6,624,709 shares of common stock issuable upon the exercise of options outstanding at a weighted average exercise price of \$10.10 per share;

2,759,563 restricted stock units and 443,954 performance stock units that were outstanding as of June 30, 2016;

and 13,045,549 shares of common stock reserved for issuance under our 2013 Long-Term Incentive Plan as of June 30, 2016.

S-3

Table of Contents

Risk Factors

Investment in our common stock involves risks. You should carefully consider the risks and uncertainties described in the prospectus and the documents incorporated by reference herein or therein, including risk factors described in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K we file after the date of this prospectus supplement, as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended (the Exchange Act). The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

S-4

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus supplement and any accompanying prospectus include and incorporate forward-looking statements (including within the meaning of the Private Securities Litigation Reform Act of 1995) which reflect our current views with respect to future events and financial performance. These forward-looking statements are generally identified by their use of such terms and phrases as intend, goal, estimate, expect, project, projections, plans, anticipate, could, designed to, foreseeable future, believe, think, scheduled, outlook, guidance and similar expressions. Not all forward-looking statements contain such language. This list of indicative terms and phrases is not intended to be all-inclusive.

These statements are subject to various risks and uncertainties, many of which are outside our control, including, without limitation:

our ability to integrate the BNS business on a timely and cost effective manner;

our reliance on TE Connectivity for transition services for the BNS business;

our ability to realize expected growth opportunities and cost savings from the BNS business;

our dependence on customers' capital spending on communication systems;

concentration of sales among a limited number of customers and channel partners;

changes in technology;

industry competition and the ability to retain customers through product innovation, introduction and marketing;

risks associated with our sales through channel partners;

product performance issues and associated warranty claims;

our ability to maintain effective information management systems and to successfully implement major systems initiatives;

cyber-security incidents, including data security breaches or computer viruses;

the risk our global manufacturing operations suffer production or shipping delays causing difficulty in meeting customer demands;

the risk that internal production capacity and that of contract manufacturers may be insufficient to meet customer demand or quality standards for our products;

changes in cost and availability of key raw materials, components and commodities and the potential effect on customer pricing;

risks associated with our dependence on a limited number of key suppliers;

our ability to fully realize anticipated benefits from prior or future acquisitions or equity investments;

potential difficulties in realigning global manufacturing capacity and capabilities among our global manufacturing facilities, including delays or challenges related to removing, transporting or reinstalling equipment, that may affect our ability to meet customer demands for products;

possible future restructuring actions;

substantial indebtedness and maintaining compliance with debt covenants;

our ability to incur additional indebtedness;

our ability to generate cash to service our indebtedness;

possible future impairment charges for fixed or intangible assets, including goodwill;

Table of Contents

income tax rate variability and ability to recover amounts recorded as value-added tax receivables;

our ability to attract and retain qualified key employees;

labor unrest;

significant international operations expose us to economic, political and other risks, including the impact of variability in foreign exchange rates;

our ability to comply with governmental anti-corruption laws and regulations and export and import controls worldwide;

our ability to compete in international markets due to export and import controls to which we may be subject;

cost of protecting or defending intellectual property;

costs and challenges of compliance with domestic and foreign environmental laws; and

other factors beyond our control.

In addition, important factors included or incorporated in this prospectus supplement and any accompanying prospectus, particularly under the heading Risk Factors, among others, could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. We do not undertake an obligation to update any forward-looking statements to reflect future events or circumstances.

Table of Contents

USE OF PROCEEDS

All shares of our common stock offered by this prospectus supplement will be sold by the selling stockholder. We will not receive any proceeds from the sale of these shares.

S-7

Table of Contents**SELLING STOCKHOLDER**

The following table presents information concerning the beneficial ownership of the shares of our common stock by the selling stockholder assuming 192,618,113 shares of common stock were issued and outstanding as of June 30, 2016, which includes 10,000,000 shares to be sold by the selling stockholder in connection with this offering (or 11,500,000 shares if the underwriter fully exercises its option to purchase additional shares).

The information in the table below with respect to the selling stockholder has been obtained from the selling stockholder. When we refer to the selling stockholder in this prospectus supplement, we mean the selling stockholder listed in the table below as offering shares, as well as their respective pledgees, donees, assignees, transferees and successors and others who may hold any of the selling stockholder's interest. The selling stockholder may be deemed to be an underwriter within the meaning of the Securities Act.

Name of selling stockholder	Shares beneficially owned prior to this offering		Shares to be sold in this offering		Shares beneficially owned after this offering			
	Number	Percent	Excluding exercise of option	Including exercise of option	Excluding exercise of option	Percent	Including exercise of option	Percent
Carlyle-CommScope Holdings, L.P.(1)	29,716,970	15.4%	10,000,000	11,500,000	19,716,970	10.2%	18,216,970	9.5%

- (1) Carlyle-CommScope Holdings, L.P. is the record holder of 29,716,970 shares of our common stock. Carlyle Group Management L.L.C. is the general partner of The Carlyle Group L.P., which is a publicly traded entity listed on NASDAQ. The Carlyle Group L.P. is the sole shareholder of Carlyle Holdings I GP Inc., which is the managing member of Carlyle Holdings I GP Sub L.L.C., which is the general partner of Carlyle Holdings I L.P., which is the managing member of TC Group, L.L.C., which is the managing member of TC Group CommScope Holdings, L.L.C., which is the general partner of Carlyle-CommScope Holdings, L.P. Accordingly, each of the foregoing entities may be deemed to share beneficial ownership of the shares of common stock owned of record by Carlyle-CommScope Holdings, L.P. The principal address of each of the foregoing entities is c/o The Carlyle Group, 1001 Pennsylvania Avenue, N.W., Suite 220 South, Washington, D.C. 20004-2505.

Table of Contents

MATERIAL U.S. FEDERAL TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax consequences to non-U.S. holders (as defined below) of the purchase, ownership and disposition of our common stock sold pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or foreign tax laws are not discussed. This discussion is based on the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service ("IRS") in effect as of the date of this offering. These authorities may change or be subject to differing interpretations. Any such change may be applied retroactively in a manner that could adversely affect a non-U.S. holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to non-U.S. holders that hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a non-U.S. holder's particular circumstances, including the impact of the unearned income Medicare contribution tax. In addition, it does not address consequences relevant to non-U.S. holders subject to particular rules, including, without limitation:

U.S. expatriates and certain former citizens or long-term residents of the United States;

persons subject to the alternative minimum tax;

persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;

banks, insurance companies, and other financial institutions;

brokers, dealers or traders in securities;

controlled foreign corporations, passive foreign investment companies, and corporations that accumulate earnings to avoid U.S. federal income tax;

partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);

tax-exempt organizations or governmental organizations;

persons deemed to sell our common stock under the constructive sale provisions of the Code;

persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation; and

tax-qualified retirement plans and foreign pension funds.

If an entity treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner (or other owner) in such entity will depend on the status of the partner (or other owner), the activities of such entity and certain determinations made at the partner (or owner) level. Accordingly, entities treated as partnerships for U.S. federal income tax purposes that hold our common stock and the partners (or owners) in such entities should consult their tax advisors regarding the U.S. federal income tax consequences to them of purchasing, owning and disposing of our common stock.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND

S-9

Table of Contents

DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a Non-U.S. Holder

For purposes of this discussion, a non-U.S. holder is any beneficial owner of our common stock that is neither a U.S. person nor an entity treated as a partnership for U.S. federal income tax purposes. A U.S. person is any of the following:

an individual who is a citizen or resident of the United States;

a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof, or the District of Columbia;

an estate, the income of which is subject to U.S. federal income tax regardless of its source; or

a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more United States persons (within the meaning of Section 7701(a)(30) of the Code), or (2) has made a valid election under applicable Treasury Regulations to continue to be treated as a United States person.

Distributions

Cash or other property distributions on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a non-U.S. holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below in the section relating to the sale or disposition of our common stock.

Subject to the discussion below on effectively connected income, dividends paid to a non-U.S. holder of our common stock will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty).

Non-U.S. holders will be entitled to a reduction in or an exemption from withholding on dividends as a result of either (a) an applicable income tax treaty or (b) the dividends being received by the non-U.S. Holder in connection with the non-U.S. holder's conduct of a trade or business within the United States. To claim such a reduction in or exemption from withholding, the non-U.S. holder must provide the applicable withholding agent with a properly executed (a) IRS Form W-8BEN or W-8BEN-E claiming an exemption from or reduction of the withholding tax under the benefit of an income tax treaty between the United States and the country in which the non-U.S. holder resides or is established, or (b) IRS Form W-8ECI stating that the dividends are not subject to withholding tax because they are effectively connected with the conduct by the non-U.S. holder of a trade or business within the United States, as may be applicable. These certifications must be provided to the applicable withholding agent prior to the payment of

dividends and may be required to be updated periodically. Non-U.S. holders that do not timely provide the applicable withholding agent with the required certification, but that qualify for a reduced rate under an applicable income tax treaty, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

If dividends paid to a non-U.S. holder are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such dividends are attributable), then, although exempt from U.S. federal withholding tax (provided the non-U.S. holder provides appropriate certification, as described above), the non-U.S. holder will be subject to U.S. federal income tax on such dividends on a net income basis at regular graduated rates. In addition, a non-U.S. holder that is a corporation

S-10

Table of Contents

may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits for the taxable year that are attributable to such dividends, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Sale or Other Taxable Disposition

A non-U.S. holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

the gain is effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such gain is attributable);

the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or

our common stock constitutes a U.S. real property interest ("USRPI") by reason of our status as a U.S. real property holding corporation (a "USRPHC") for U.S. federal income tax purposes.

Gain described in the first bullet point above will generally be subject to U.S. federal income tax on a net income basis at regular graduated rates. A non-U.S. holder that is a foreign corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits for the taxable year that are attributable to such gain, as adjusted for certain items.

A non-U.S. holder described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on any gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder (even though the individual is not considered a resident of the United States). Such a non-U.S. holder generally will be required to file a U.S. federal income tax return with respect to such gains and losses.

With respect to the third bullet point above, we believe we are not currently and do not anticipate becoming a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our other business assets and our non-U.S. real property interests, however, there can be no assurance we are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a non-U.S. holder of our common stock will not be subject to U.S. federal income tax if such class of stock is regularly traded, as defined by applicable Treasury Regulations, on an established securities market, and such non-U.S. holder owned, actually or constructively, 5% or less of such class of our stock throughout the shorter of the five-year period ending on the date of the sale or other disposition or the non-U.S. holder's holding period for such stock.

Non-U.S. holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

A non-U.S. holder will not be subject to backup withholding with respect to payments of dividends on our common stock, provided the applicable withholding agent does not have actual knowledge or reason to know such holder is a United States person and the holder certifies its non-U.S. status, such as by providing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or other applicable certification.

However, information returns will be filed with the IRS in connection with any dividends on our common stock paid to the non-U.S. holder, regardless of whether any tax was actually withheld. Copies of these information

S-11

Table of Contents

returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Information reporting and backup withholding may apply to the proceeds of a sale of our common stock within the United States, and information reporting may (although backup withholding generally will not) apply to the proceeds of a sale of our common stock outside the United States conducted through certain U.S.-related financial intermediaries, in each case, unless the non-U.S. holder certifies under penalty of perjury that it is a non-U.S. holder on IRS Form W-8BEN, W-8BEN-E or other applicable form (and the payor does not have actual knowledge or reason to know that such holder is a United States person) or such holder otherwise establishes an exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a non-U.S. holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under the Code provisions commonly known as the Foreign Account Tax Compliance Act (FATCA) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a foreign financial institution or a non-financial foreign entity (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any substantial United States owners (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain specified United States persons or United States owned foreign entities (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Non-U.S. governments have entered into intergovernmental agreements with the United States (and additional non-U.S. governments are expected to enter into such agreements) to implement FATCA in a manner that alters the rules described herein.

Withholding under FATCA generally will apply to payments of dividends on our common stock regardless of when they are made. However, under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally will only apply to payments of gross proceeds from the sale or other disposition of such stock on or after January 1, 2019. If a dividend payment is both subject to withholding under FATCA and subject to the withholding tax discussed above under Distributions, the withholding under FATCA may be credited against such other withholding tax.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

Table of Contents

UNDERWRITING

Credit Suisse Securities (USA) LLC is acting as the underwriter of the offering. Subject to the terms and conditions set forth in an underwriting agreement among us, the selling stockholder and the underwriter, the selling stockholder has agreed to sell to the underwriter, and the underwriter has agreed to purchase from the selling stockholder, 10,000,000 shares of common stock.

Subject to the terms and conditions set forth in the underwriting agreement, the underwriter has agreed to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased.

We and the selling stockholder have agreed to indemnify the underwriter against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriter may be required to make in respect of those liabilities.

The underwriter is offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriter of officers' certificates and legal opinions. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

The shares may be offered by the underwriter from time to time to purchasers directly or through agents, or through brokers in brokerage transaction on the Nasdaq Global Select Market, or to dealers in negotiated transactions or in a combination of such methods of sale, at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices.

The expenses of the offering, including expenses incurred by the selling stockholder but not including the underwriting discount, are estimated at \$750,000 and are payable by us. We have also agreed to reimburse the underwriter for certain of its expenses in connection with this offering including their expenses, if any, relating to any required reviews by FINRA in an amount up to \$20,000.

The selling stockholder has granted an option to the underwriter to purchase up to 1,500,000 additional shares at the public offering price, less the underwriting discount. The underwriter may exercise this option for 30 days from the date of this prospectus supplement.

We, our directors, certain of our executive officers and the selling stockholder have agreed, subject to certain exceptions (including with respect to securities issued in connection with an acquisition, joint venture, commercial relationship or strategic transaction up to 10% of the number of shares of common stock outstanding upon closing of this offering and provided the recipient enters into a lock-up agreement), not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for or repayable with common stock, for 45 days after the date of this prospectus supplement without first obtaining the written consent of the underwriter. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

offer, pledge, sell or contract to sell any common stock;

sell any option or contract to purchase any common stock;

purchase any option or contract to sell any common stock;

grant any option, right or warrant for the sale of any common stock;

lend or otherwise dispose of or transfer any common stock;

request or demand that we file a registration statement related to the common stock; or

S-13

Table of Contents

enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

The shares of common stock are listed on Nasdaq under the symbol COMM.

In connection with this offering, the underwriter may engage in passive market making transactions in the common stock on the Nasdaq Global Market in accordance with Rule 103 of Regulation M under the Exchange Act during a period before the commencement of offers or sales of common stock and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded. Passive market making may cause the price of our common stock to be higher than the price that otherwise would exist in the open market in the absence of those transactions. The underwriter and dealers are not required to engage in passive market making and may end passive market making activities at any time.

Until the distribution of the shares is completed, SEC rules may limit the underwriter from bidding for and purchasing our common stock. However, the underwriter may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriter may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriter of a greater number of shares than they are required to purchase in the offering. Covered short sales are sales made in an amount not greater than the underwriter's option described above. The underwriter may close out any covered short position by either exercising its option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which it may purchase shares through the option. Naked short sales are sales in excess of the option. The underwriter must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriter in the open market prior to the completion of the offering.

Similar to other purchase transactions, the underwriter's purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriter may conduct these transactions on the exchange on Nasdaq, in the over-the-counter market or otherwise.

None of us, the selling stockholder or the underwriter makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, none of us, the selling stockholder or the underwriter makes any representation that the underwriter will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

In connection with the offering, the underwriter or securities dealers may distribute prospectuses by electronic means, such as e-mail. In addition, the underwriter may facilitate Internet distribution for this offering to certain

S-14

Table of Contents

of its Internet subscription customers. The underwriter may allocate a limited number of shares for sale to its online brokerage customers. An electronic prospectus is available on the Internet web site maintained by the underwriter. Other than the prospectus in electronic format, the information on the web site of the underwriter is not part of this prospectus.

The underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriter and its affiliates have, from time to time, performed, and may in the future perform, various financial advisory, investment banking, commercial banking and other services for us and our affiliates for which they received or will receive customary fees and expenses. In particular, the underwriter or its affiliates have acted as an underwriter or initial purchaser in our prior initial public offering and secondary offerings and/or prior notes offerings and act as lenders and/or agents under our senior secured credit facilities. Furthermore, the underwriter and its affiliates may, from time to time, enter into arms-length transactions with us in the ordinary course of their business.

In the ordinary course of its various business activities, the underwriter and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of ours. The underwriter and its affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State no offer of shares which are the subject of the offering contemplated by this prospectus may be made to the public in that Relevant Member State other than:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the relevant dealer or dealers nominated by CommScope for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares shall result in a requirement for CommScope or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive or a supplemental prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression an offer of shares to the public in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe for the shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State. The expression Prospectus Directive means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss

S-15

Table of Contents

Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, us, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This document relates to an exempt offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (DFSA). This document is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with exempt offers. The DFSA has not approved this document nor taken steps to verify the information set forth herein and has no responsibility for it. The shares to which this document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this document you should consult an authorized financial advisor.

Notice to Prospective Investors in Hong Kong

This prospectus has not been approved by or registered with the Securities and Futures Commission of Hong Kong or the Registrar of Companies of Hong Kong. The shares will not be offered or sold in Hong Kong other than (a) to professional investors as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a prospectus as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) has been issued or will be issued in Hong Kong or elsewhere other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act (Chapter 289), or the SFA, (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust

(where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, then shares, debentures and units of shares and debentures of that corporation or the beneficiaries rights and interest in that trust shall

S-16

Table of Contents

not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (i) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (ii) where no consideration is given for the transfer; or (iii) by operation of law.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph,

Japanese Person shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Chile

The shares are not registered in the Securities Registry (Registro de Valores) or subject to the control of the Chilean Securities and Exchange Commission (Superintendencia de Valores y Seguros de Chile). This prospectus and other offering materials relating to the offer of the shares do not constitute a public offer of, or an invitation to subscribe for or purchase, the shares in the Republic of Chile, other than to individually identified purchasers pursuant to a private offering within the meaning of Article 4 of the Chilean Securities Market Act (Ley de Mercado de Valores) (an offer that is not addressed to the public at large or to a certain sector or specific group of the public).

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are qualified investors (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the Order) and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (ASIC), in relation to the offering. This document does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the Corporations Act), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the Exempt Investors) who are sophisticated investors (within the meaning of section 708(8) of the Corporations Act), professional investors (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the

Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of

S-17

Table of Contents

the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This document contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this document is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement and any accompanying prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriter is not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Table of Contents

LEGAL MATTERS

The validity of the common stock being offered by this prospectus supplement will be passed upon for us by Latham & Watkins LLP, Washington, District of Columbia. The validity of the common stock being sold in this offering will be passed upon for the underwriter by Simpson Thacher & Bartlett LLP, New York, New York.

EXPERTS

The consolidated financial statements of CommScope Holding Company Inc. (the "Company") appearing in the Company's Annual Report (Form 10-K) for the year ended December 31, 2015 (including the schedule appearing therein), and the effectiveness of the Company's internal control over financial reporting as of December 31, 2015 (excluding the internal control over financial reporting of the BNS business and Airvana), have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in its reports thereon (which as to the report on the effectiveness of the Company's internal control over financial reporting contains an explanatory paragraph describing the above referenced exclusion of the BNS business and Airvana from the scope of such firm's audit of internal control over financial reporting), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

The combined financial statements, incorporated herein by reference, of the Broadband Network Solutions business of TE Connectivity Ltd. as of September 26, 2014 and September 27, 2013, and for each of the fiscal years in the three-year period ended September 26, 2014, have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report (which report expresses an unmodified opinion and includes an emphasis-of-matter paragraph relating to allocations from TE Connectivity Ltd.), which is incorporated herein by reference, and are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC. Information filed with the SEC by us can be inspected and copied at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of this information by mail from the Public Reference Room of the SEC at prescribed rates. Further information on the operation of the SEC's Public Reference Room in Washington, D.C. can be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>.

These periodic and current reports and all amendments to those reports are also available free of charge on the investor relations page of our website at <http://ir.commscope.com>. We have included our website address throughout this filing as textual references only. The information on our web site, however, is not, and should not be deemed to be, a part of this prospectus supplement.

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Forms of the documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement. Statements in this prospectus supplement or the accompanying prospectus about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement at the SEC's Public Reference Room in

Washington, D.C. or through the SEC's website, as provided above.

S-19

Table of Contents

INCORPORATION BY REFERENCE

The SEC's rules allow us to incorporate by reference information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus supplement, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement modifies or replaces that statement.

We incorporate by reference our documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, between the date of this prospectus supplement and the termination of this offering. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed below or filed in the future, that are not deemed filed with the SEC, including our Compensation Committee report, the Report of the Audit Committee and performance graph or any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K except as set forth below.

This prospectus supplement and the accompanying prospectus incorporate by reference the documents set forth below that have previously been filed with the SEC:

Our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on February 19, 2016.

Our Quarterly Reports on Form 10-Q for the three months ended March 31, 2016 and the six months ended June 30, 2016, filed with the SEC on April 28, 2016 and July 28, 2016, respectively.

The portions of our Definitive Proxy Statement on Schedule 14A that were deemed filed with the SEC on March 17, 2016.

Our Current Reports on Form 8-K or 8-K/A, filed with the SEC on March 2, 2015, May 20, 2015, September 8, 2015, May 4, 2016, May 6, 2016, August 23, 2016 and August 25, 2016.

The description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on October 22, 2013 (File No. 001-36146) and any amendment or report filed with the SEC for the purpose of updating such description.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus supplement and deemed to be part of this prospectus supplement from the date of the filing of such reports and documents.

Edgar Filing: CommScope Holding Company, Inc. - Form 424B3

You may obtain any of the documents incorporated by reference in this prospectus supplement on the SEC's website at www.sec.gov or request a copy of any or all of the documents referred to above which have been incorporated by reference (other than exhibits, unless they are specifically incorporated by reference in the documents) at no cost to the requester by writing or telephoning us at the following address:

CommScope Holding Company, Inc.

1100 CommScope Place, SE

Hickory, NC 28602

(828) 324-2200

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus supplement or the accompanying prospectus.

S-20

Table of Contents

PROSPECTUS

CommScope Holding Company, Inc.

Common Stock

The selling stockholders to be named in a prospectus supplement may offer and sell shares of our common stock from time to time in amounts, at prices and on terms that will be determined at the time of the offering.

This prospectus describes the general manner in which the shares of our common stock may be offered and sold by the selling stockholders. The specific manner in which shares of common stock may be offered and sold will be described in a supplement to this prospectus. Information about the selling stockholders, including the relationship between the selling stockholders and us, will also be included in the applicable prospectus supplement.

Selling stockholders that are affiliates of CommScope Holding Company, Inc. may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended (the Securities Act), and, as a result, may be deemed to be offering securities, indirectly, on our behalf.

The shares of our common stock may be sold at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at a negotiated price. The shares of our common stock offered by this prospectus and the accompanying prospectus supplement may be offered by the selling stockholders directly to purchasers or to or through underwriters, brokers or dealers or other agents. The prospectus supplement for each offering will describe in detail the plan of distribution for that offering and will set forth the names of any underwriters, brokers or dealers or agents involved in the offering and any applicable fees, commissions or discount arrangements. You should carefully read this prospectus and any accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in our common stock.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE RISK FACTORS ON PAGE 5 OF THIS PROSPECTUS AND ANY SIMILAR SECTION CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND THE DOCUMENTS INCORPORATED BY REFERENCE HEREIN AND THEREIN CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

Our common stock is listed on the Nasdaq Global Select Market (Nasdaq) under the symbol COMM. On March 3, 2015, the last reported sale price of our common stock on Nasdaq was \$31.56 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is March 4, 2015.

Table of Contents

TABLE OF CONTENTS

<u>ABOUT THIS PROSPECTUS</u>	1
<u>CERTAIN TRADEMARKS</u>	1
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	1
<u>INCORPORATION BY REFERENCE</u>	2
<u>THE COMPANY</u>	4
<u>RISK FACTORS</u>	5
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION</u>	7
<u>USE OF PROCEEDS</u>	9
<u>DESCRIPTION OF CAPITAL STOCK</u>	10
<u>PLAN OF DISTRIBUTION</u>	15
<u>LEGAL MATTERS</u>	19
<u>EXPERTS</u>	19

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the SEC), as a well-known seasoned issuer as defined in Rule 405 under the Securities Act, using a shelf registration process. By using a shelf registration statement, the selling stockholders to be named in a supplement to this prospectus may, from time to time, sell common stock in one or more offerings. Each time that the selling stockholders sell securities, we will provide a prospectus supplement to this prospectus that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you should rely on the prospectus supplement. Before purchasing any securities, you should carefully read both this prospectus and the applicable prospectus supplement, together with the additional information described under the headings **Where You Can Find More Information** and **Incorporation by Reference**.

We are responsible for the information contained or incorporated by reference in this prospectus, any accompanying prospectus supplement and in any related free-writing prospectus we prepare or authorize. Neither we nor the selling stockholders have authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. We and the selling stockholders will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate as of the date on its respective cover, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates.

THIS PROSPECTUS MAY NOT BE USED TO SELL ANY SHARES OF OUR COMMON STOCK UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

Unless otherwise noted in this prospectus, the term **CommScope Holdings** means CommScope Holding Company, Inc. When we refer to **CommScope**, **we**, **our**, **us** and the **Company** in this prospectus, we mean CommScope Holdings and its direct and indirect subsidiaries on a consolidated basis, unless otherwise specified.

CERTAIN TRADEMARKS

We own or otherwise have rights to the trademarks, copyrights and service marks, including those mentioned in this prospectus, used in conjunction with the marketing and sale of our products and services. This prospectus includes trademarks, such as CommScope, which are protected under applicable intellectual property laws and are our property and/or the property of our subsidiaries. This prospectus also contains trademarks, service marks, copyrights and trade names of other companies, which are the property of their respective owners. We do not intend our use or display of other companies' trademarks, service marks, copyrights or trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies. Solely for convenience, our trademarks and tradenames referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks and tradenames.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC. Information filed with the SEC by us can be inspected and copied at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C.

20549. You may also obtain copies of this information by mail from the Public Reference

Table of Contents

Room of the SEC at prescribed rates. Further information on the operation of the SEC's Public Reference Room in Washington, D.C. can be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>.

These periodic and current reports and all amendments to those reports are also available free of charge on the investor relations page of our website at <http://ir.commscope.com>. We have included our website address throughout this filing as textual references only. The information on our web site, however, is not, and should not be deemed to be, a part of this prospectus.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement at the SEC's Public Reference Room in Washington, D.C. or through the SEC's website, as provided above.

INCORPORATION BY REFERENCE

The SEC's rules allow us to incorporate by reference information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or replaces that statement.

We incorporate by reference our documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act), between the date of this prospectus and the termination of the offering of the securities described in this prospectus. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed below or filed in the future, that are not deemed filed with the SEC or any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

Our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on February 20, 2015.

The portions of our Definitive Proxy Statement on Schedule 14A that were deemed filed with the SEC on March 11, 2014.

Our Current Reports on Form 8-K, filed with the SEC on January 28, 2015 and March 2, 2015.

The description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on October 22, 2013 (File No. 001-36146) and any amendment or report filed with the SEC for the purpose of updating such description.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, but excluding any information furnished to, rather than

Table of Contents

filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

You may obtain any of the documents incorporated by reference in this prospectus on the SEC's website at www.sec.gov or request a copy of any or all of the documents referred to above which have been incorporated by reference (other than exhibits, unless they are specifically incorporated by reference in the documents) at no cost to the requester by writing or telephoning us at the following address:

CommScope Holding Company, Inc.

1100 CommScope Place, SE

Hickory, NC 28602

(828) 324-2200

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus and any accompanying prospectus supplement.

Table of Contents

THE COMPANY

We are a leading global provider of connectivity and essential infrastructure solutions for wireless, business enterprise and residential broadband networks. We help companies around the world design, build and manage their wired and wireless networks by providing critical radio frequency (RF) solutions, intelligent connectivity and cabling platforms, data center and intelligent building infrastructure and broadband access solutions. Demand for our offerings is driven by the rapid growth of data traffic and need for bandwidth from the continued adoption of smartphones, tablets, machine-to-machine communication and the proliferation of data centers, Big Data, cloud-based services and streaming media content. Our solutions are built upon innovative RF technology, service capabilities, technological expertise and intellectual property, including approximately 2,700 patents and patent applications worldwide. We have a team of approximately 13,000 people to serve our customers in over 100 countries through a network of more than 20 world-class manufacturing and distribution facilities strategically located around the globe. Our customers include substantially all of the leading global wireless operators as well as thousands of enterprise customers, including many Fortune 500 enterprises, and leading multi-system operators. We have long-standing, direct relationships with our customers and serve them through a sales force consisting of more than 600 employees and a global network of channel partners. Our offerings for wired and wireless networks enable delivery of high-bandwidth data, video and voice applications. To drive incremental revenue and profit, wireless operators and enterprises around the world are utilizing our solutions to increase bandwidth; manage existing capacity; improve network performance and availability; increase energy efficiency; and simplify technology migration.

For the year ended December 31, 2014, our revenues were \$3.83 billion and our net income was \$236.8 million. The table below summarizes our offerings, global leadership positions and 2014 revenue:

(1) Excludes inter-segment eliminations.

In January 2011, funds affiliated with The Carlyle Group (Carlyle) completed the acquisition of CommScope, Inc., our predecessor. Under the terms of the acquisition, CommScope, Inc. became a wholly-owned subsidiary of CommScope Holdings.

CommScope Holding Company, Inc. was incorporated in Delaware on October 22, 2010. Our principal executive offices are located at 1100 CommScope Place, SE, Hickory, NC 28602 and our telephone number is (828) 324-2200. Our internet address is www.commscope.com. The contents of our website are not part of this prospectus.

Table of Contents

RISK FACTORS

Investment in our securities involves risks. You should carefully consider the risk factors incorporated by reference to our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K we file after the date of this prospectus, and all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Exchange Act, as well as the risk factors and other information contained in the applicable prospectus supplement before acquiring any of such securities. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

Risks Relating to the Offering and Our Common Stock

Upon the sale of a sufficient number of shares by an affiliate of Carlyle in an offering, we would no longer be a controlled company, and we may have difficulties complying with Nasdaq rules relating to the composition of our board of directors.

Our common stock is listed on Nasdaq. As a controlled company under Nasdaq rules, we have not been subject to a number of corporate governance rules relating to composition of our board of directors and certain committees. Upon the sale of a sufficient number of shares by an affiliate of Carlyle in an offering, we would no longer be a controlled company and, in accordance with Nasdaq rules, would have to phase into compliance with certain requirements from which we are now exempt, including:

the requirement that a majority of the board of directors consist of independent directors;

the requirement that we have a nominating and corporate governance committee that is composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities; and

the requirement that we have a compensation committee that is composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities.

We intend to comply with these Nasdaq rules if we cease to be a controlled company. We may not be able to attract and retain the number of independent directors needed to comply with Nasdaq rules during the phase-in period for compliance.

An offering may result in a substantial amount of previously unregistered shares of our common stock being registered, which may depress the market price of our common stock.

Of the 187,831,389 shares of our common stock issued and outstanding as of December 31, 2014, approximately 53.9% were held by Carlyle. The remainder of our shares of issued and outstanding common stock are freely tradable on Nasdaq without restriction or further registration under the Securities Act of 1933, as amended (the "Securities Act"), unless purchased by our affiliates as that term is defined in Rule 144 under the Securities Act. The shares of common stock being sold in an offering were not freely tradable on Nasdaq prior to the completion of such offering, and the sale by a selling stockholder of the shares of common stock in an offering will increase the number of shares of our common stock eligible to be traded on Nasdaq, which could depress the market price of our common stock.

Sales of substantial amounts of our common stock, or the possibility of such sales, may adversely affect the price of our common stock.

Sales of substantial amounts of our common stock in the public market after an offering, or the perception that such sales will occur, could adversely affect the market price of our common stock and make it difficult for us to raise funds through securities offerings in the future. As of December 31, 2014, there were 187,831,389 shares of our common stock issued and outstanding, of which all of the 81,933,213 shares sold in registered offerings prior to the date hereof and all shares to be sold in an offering pursuant to this prospectus will be freely transferable without restriction or further registration under the Securities Act, unless acquired by our affiliates as that term is defined in Rule 144 under the Securities Act.

Table of Contents

In addition, all shares of common stock acquired upon exercise of stock options and other equity-based awards granted under our stock incentive plans will also be freely tradable under the Securities Act unless acquired by our affiliates. A maximum of 28.2 million shares of common stock are reserved for issuance under our stock incentive plans, some of which have been issued as of the date of this prospectus supplement. The remaining shares of common stock outstanding will be restricted securities within the meaning of Rule 144 under the Securities Act, but will be eligible for resale subject to applicable volume, manner of sale, holding period and other limitations of Rule 144 or pursuant to an exemption from registration under Rule 701 under the Securities Act.

We, our directors, certain of our executive officers and Carlyle may agree to a lock-up in connection with an offering, meaning that, subject to certain exceptions, neither we nor they will sell any shares without the prior consent of the underwriter before a certain period of time after an offering. Following the expiration of this lock-up period, all of these shares of our common stock will be eligible for future sale, subject to the applicable volume, manner of sale, holding period and other limitations of Rule 144. In addition, Carlyle has the right under certain circumstances to require that we register their remaining shares for resale. As of the date of this prospectus, these registration rights apply to the 101,216,970 shares of our outstanding common stock owned by Carlyle. See the section entitled

Description of Capital Stock Amended and Restated Stockholders Agreement for a description of the shares of common stock that may be sold into the public market in the future.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus and any accompanying prospectus supplement include and incorporate forward-looking statements (including within the meaning of the Private Securities Litigation Reform Act of 1995) which reflect our current views with respect to future events and financial performance. These forward-looking statements are identified by their use of such terms and phrases as intend, goal, estimate, expect, project, projections, plans, anticipate, should, designed to, foreseeable future, believe, think, scheduled, outlook, guidance and similar expressions. This indicative terms and phrases is not intended to be all-inclusive.

These statements are subject to various risks and uncertainties, many of which are outside our control, including, without limitation:

our dependence on customers capital spending on communication systems;

concentration of sales among a limited number of customers or distributors;

changes in technology;

our ability to fully realize anticipated benefits from prior or future acquisitions or equity investments;

industry competition and the ability to retain customers through product innovation, introduction and marketing;

risks associated with our sales through channel partners;

possible production disruptions due to supplier or contract manufacturer bankruptcy, reorganization or restructuring;

the risk our global manufacturing operations suffer production or shipping delays causing difficulty in meeting customer demands;

the risk that internal production capacity and that of contract manufacturers may be insufficient to meet customer demand or quality standards for our products;

our ability to maintain effective information management systems and to successfully implement major systems initiatives;

cyber-security incidents, including data security breaches or computer viruses;

product performance issues and associated warranty claims;

significant international operations and the impact of variability in foreign exchange rates;

our ability to comply with governmental anti-corruption laws and regulations and export and import controls worldwide;

our ability to compete in international markets due to export and import controls to which we may be subject;

the divestiture of one or more product lines;

potential difficulties in realigning global manufacturing capacity and capabilities among our global manufacturing facilities, including delays or challenges related to removing, transporting or reinstalling equipment, that may affect ability to meet customer demands for products;

possible future restructuring actions;

possible future impairment charges for fixed or intangible assets, including goodwill;

increased obligations under employee benefit plans;

Table of Contents

cost of protecting or defending our intellectual property and defending against third party intellectual property claims;

changes in laws or regulations affecting us or the industries we serve;

costs and challenges of compliance with domestic and foreign environmental laws and the effects of climate change;

changes in cost and availability of key raw materials, components and commodities and the potential effect on customer pricing;

risks associated with our dependence on a limited number of key suppliers;

our ability to attract and retain qualified key employees;

allegations of health risks from wireless equipment;

availability and adequacy of insurance;

natural or man-made disasters or other disruptions;

income tax rate variability and ability to recover amounts recorded as value-added tax receivables;

labor unrest;

risks associated with future research and development projects;

compliance with regulations related to conflict minerals may impact our ability to obtain inputs for our products or relationships with our customers;

risks associated with the seasonality of our business;

our substantial indebtedness and ability to maintain compliance with debt covenants;

our ability to incur additional indebtedness;

the ability of our lenders to fund borrowings under their credit commitments;

cash requirements to service our indebtedness;

changes in capital availability or costs, such as changes in interest rates, security ratings and market perceptions of the businesses in which we operate, or the ability to obtain capital on commercially reasonable terms or at all;

global economic conditions and uncertainties and disruption in the capital, credit and commodities markets;

our ability to consummate the proposed acquisition (the Acquisition) of TE Connectivity's Telecom, Enterprise and Wireless businesses (the Business) on a timely basis or at all;

risks associated with antitrust approval of the Acquisition;

our ability to integrate the Business on a timely and cost effective manner;

our reliance on TE Connectivity for transition services for some period of time after closing of the Acquisition;

risks associated with the significant additional indebtedness we expect to incur to finance the Acquisition;

our ability to realize expected growth opportunities and cost savings from the Acquisition;

any statements of belief and any statements of assumptions underlying any of the foregoing; and

other factors beyond our control.

In addition, important factors included or incorporated in this prospectus and any accompanying prospectus supplement, particularly under the heading Risk Factors, among others, could cause actual results to differ

Table of Contents

materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. We do not undertake an obligation to update any forward-looking statements to reflect future events or circumstances.

USE OF PROCEEDS

We will not receive any proceeds from the sale of our common stock by the selling stockholders.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is not complete and may not contain all the information you should consider before investing in our capital stock. This description is summarized from, and qualified in its entirety by reference to, our certificate of incorporation, which has been publicly filed with the SEC. See [Where You Can Find More Information](#) and [Incorporation by Reference](#).

Our authorized capital stock consists of 1,300,000,000 shares of common stock, par value \$0.01 per share, and 200,000,000 shares of preferred stock, par value \$0.01 per share. The rights and privileges of holders of our common stock are subject to any series of preferred stock that we may issue in the future.

Common Stock

Holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, including the election of directors, and do not have cumulative voting rights, which means that holders of a majority of the outstanding shares of common stock will be able to elect all of the directors, and holders of less than a majority of such shares will be unable to elect any director. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our Board of Directors out of funds legally available for dividend payments. As a holding company, our ability to pay dividends is subject to our subsidiaries' ability to make distributions to us. Further, the credit agreement governing CommScope, Inc.'s senior secured credit facilities, the indenture governing CommScope Holdings' 6.625% / 7.375% Senior PIK Toggle Notes due 2020, the indenture governing CommScope, Inc.'s 5.000% Senior Notes due 2021 and the indenture governing CommScope, Inc.'s 5.500% Senior Notes due 2024 impose restrictions on our ability to declare dividends on our common stock. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in our assets that are remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

Preferred Stock

The preferred stock, if issued, would have priority over the common stock with respect to dividends and other distributions, including the distribution of our assets upon liquidation. Unless required by law or by Nasdaq, our Board of Directors will have the authority without further stockholder authorization to issue from time to time shares of preferred stock in one or more series and to fix the terms, limitations, relative rights and preferences and variations of each series. Although we have no present plans to issue any shares of preferred stock, the issuance of shares of preferred stock, or the issuance of rights to purchase such shares, could decrease the amount of earnings and assets available for distribution to the holders of common stock, could adversely affect the rights and powers, including voting rights, of the common stock, and could have the effect of delaying, deterring or preventing a change in control of us or an unsolicited acquisition proposal.

Amended and Restated Stockholders Agreement

Pursuant to the amended and restated stockholders agreement, our Board of Directors consists of up to eleven members, with Carlyle having the right to designate nine of the board members. Mr. Drendel also has the right to serve as a board member, and shall serve as the non-executive chairman of the Board, for so long as he is employed by us pursuant to his employment agreement. In addition, our senior ranking executive officer has the right to serve as a

board member, who, for so long as he serves as our chief executive officer, will be Mr. Edwards. All parties to the amended and restated stockholders agreement have agreed to vote their shares in favor of such designees. Carlyle is not obligated to designate the entire number of directors to which it is entitled

Table of Contents

and any such undesignated positions shall remain vacant until such time as Carlyle exercises its right to designate such additional directors. Currently, Carlyle has designated only eight of the nine director positions to which it is entitled under the amended and restated stockholders agreement. The position for the additional Carlyle designee shall remain vacant until such time as Carlyle desires to exercise its right to designate a director to fill this vacancy, or, if it loses its right to designate any directors pursuant to the terms of the amended and restated stockholders agreement, these positions will be filled by our stockholders in accordance with our certificate of incorporation and bylaws. See

Description of Capital Stock for more information regarding our amended and restated certificate of incorporation and our amended and restated bylaws.

The amended and restated stockholders agreement will terminate upon the written agreement of CommScope Holdings and Carlyle.

Registration Rights Agreement

Pursuant to a registration rights agreement that we entered into on January 14, 2011 in connection with Carlyle's acquisition of our business, Carlyle has the right to cause CommScope Holdings, in certain instances, at its own expense, to file registration statements under the Securities Act covering resales of our common stock held by Carlyle. The registration rights agreement also provides Carlyle and certain other stockholders party to that agreement the right to piggyback on registration statements filed by CommScope Holdings in certain circumstances. The registration rights agreement also requires CommScope Holdings to indemnify certain of its stockholders and their affiliates in connection with any registrations of our securities.

Corporate Opportunities

Delaware law permits corporations to adopt provisions renouncing any interests or expectancy in certain opportunities that are presented to the corporation or its officers, directors or stockholders. Our amended and restated certificate of incorporation provides that we, on our behalf and on behalf of our subsidiaries, renounce and waive any interest or expectancy in, or in being offered an opportunity to participate in, and Carlyle will have no obligation to offer us an opportunity to participate in, business opportunities presented to Carlyle or its affiliates, including its respective officers, representatives, directors, agents, stockholders, members, partners, affiliates or subsidiaries even if the opportunity is one that we might reasonably have pursued, and that neither Carlyle nor its respective officers, representatives, directors, agents, stockholders, members, partners, affiliates or subsidiaries will be liable to us or our stockholders for breach of any duty by reason of the fact that such person pursues, acquires or participates in such corporate opportunity, directs such corporate opportunity to another person or fails to present such corporate opportunity, or information regarding such corporate opportunity, to us or our subsidiaries unless, in the case of any person who is a director or officer of our company, such business opportunity is expressly offered to such director or officer in writing solely in his or her capacity as a director or officer of our company. Stockholders will be deemed to have notice of and consented to this provision of our amended and restated certificate of incorporation.

Limitations on Directors' Liability

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions indemnifying our directors and officers to the fullest extent permitted by law because of the director's or officer's positions with us or another entity that the director or officer serves at our request and to advance funds to our directors and officers to enable them to defend against such proceedings. We have entered into indemnification agreements with each of our directors and certain of our officers which provide them with contractual rights to indemnification and expense advancement which are, in some cases, broader than the specific indemnification provisions contained under Delaware law.

In addition, as permitted by Delaware law, our amended and restated certificate of incorporation provides that no director will be liable to us or our stockholders for monetary damages for breach of fiduciary duty as a

Table of Contents

director. The inclusion of this provision in our amended and restated certificate of incorporation may discourage or deter stockholders or management from bringing a lawsuit against directors for a breach of their fiduciary duties, even though such an action, if successful, might otherwise have benefited us and our stockholders. The effect of this provision is to restrict our rights and the rights of our stockholders in derivative suits to recover monetary damages against a director for breach of fiduciary duty as a director, except that a director will be personally liable for:

any breach of his or her duty of loyalty to us or our stockholders;

acts or omissions not in good faith which involve intentional misconduct or a knowing violation of law;

the payment of dividends or the redemption or purchase of stock in violation of Delaware law; or

any transaction from which the director derived an improper personal benefit.

This provision does not affect a director's liability under the federal securities laws.

Provisions of Our Amended and Restated Certificate of Incorporation, Amended and Restated Bylaws and Delaware Law that May Have an Anti-Takeover Effect

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Certain provisions in our amended and restated certificate of incorporation and amended and restated bylaws summarized below may be deemed to have an anti-takeover effect and may delay, deter or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, including attempts that might result in a premium being paid over the market price for the shares held by stockholders.

Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

authorize 1,300,000,000 shares of common stock, which, to the extent unissued, will be available for future issuance without additional stockholder approval and, under some circumstances, we could use the additional shares to create voting impediments or to frustrate persons seeking to effect a takeover or otherwise gain control by, for example, issuing those shares in private placements to purchasers who might side with our Board of Directors in opposing a hostile takeover bid;

authorize the issuance of blank check preferred stock that our Board of Directors could, without further stockholder authorization, issue to increase the number of outstanding shares, issue with super voting, special approval, dividend or other rights or preferences and otherwise issue to discourage a takeover attempt;

limit the ability of stockholders to remove directors only for cause if Carlyle and its affiliates collectively cease to own more than 50% of our common stock and require any such removal to be approved by holders of at least three-quarters of the outstanding shares of common stock;

prohibit our stockholders from calling a special meeting of stockholders if Carlyle and its affiliates collectively cease to own more than 50% of our common stock;

prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders, if Carlyle and its affiliates collectively cease to own more than 50% of our common stock;

provide that the Board of Directors is expressly authorized to adopt, alter or repeal our bylaws;

established advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted upon by stockholders at stockholder meetings;

require a stockholder's notice proposing to nominate a person for election as director to include specific information about the nominating stockholder and the proposed nominee

Table of Contents

require a stockholder's notice proposing to nominate a person for election as director to include specific information about the nominating stockholder and the proposed nominee

require a stockholder's notice relating to the conduct of business (other than the nomination of directors) to contain specific information about the business and the proposing stockholder

established a classified Board of Directors, with three classes of directors

grant to the Board of Directors the sole power to set the number of directors and to fill any vacancy on the Board; and

require the approval of holders of at least three-quarters of the outstanding shares of common stock to amend the bylaws and certain provisions of the certificate of incorporation if Carlyle and its affiliates collectively cease to own more than 50% of our common stock.

The foregoing provisions of our amended and restated certificate of incorporation and amended and restated bylaws could discourage potential acquisition proposals and could delay or prevent a change in control and could also affect the price that some investors are willing to pay for our common stock. These provisions are intended to enhance the likelihood of continuity and stability in the composition of the Board of Directors and in the policies formulated by the Board of Directors and to discourage certain types of transactions that may involve an actual or threatened change of control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and encourage persons seeking to acquire control of our company to first consult with our Board of Directors to negotiate the terms of any proposed business combination or offer. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our common stock that could result from actual or rumored takeover attempts. Such provisions also may have the effect of preventing changes in our management.

Delaware Takeover Statute

Subject to certain exceptions, Section 203 of the Delaware General Corporation Law ("DGCL") prohibits a Delaware corporation from engaging in any business combination (as defined below) with any interested stockholder (as defined below) for a period of three years following the date that such stockholder became an interested stockholder, unless: (1) prior to such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (2) on consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned (x) by persons who are directors and also officers and (y) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (3) on or subsequent to such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In our amended and restated certificate of incorporation, we elected not to be governed by Section 203 of the DGCL, as permitted under and pursuant to subsection (b)(3) of Section 203. Section 203 of the DGCL defines "business combination" to include: (1) any merger or consolidation involving the corporation and the interested stockholder; (2) any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder; (3) subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; (4) any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or (5) the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits

Table of Contents

provided by or through the corporation. In general, Section 203 defines an "interested stockholder" as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person.

Choice of Forum

Our amended and restated certificate of incorporation provides that a state court located within the State of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware) will be the exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed to us or our stockholders by our directors, officers, employees or agents, (iii) any action asserting a claim against us arising under the DGCL, the amended and restated certificate of incorporation and the amended and restated by laws or (iv) any action asserting a claim against us or any of our directors or officers or other employees that is governed by the internal affairs doctrine. It is possible that a court could rule that this provision is not applicable or is unenforceable. We may consent in writing to alternative forums. Stockholders will be deemed to have notice of and consented to this provision of our amended and restated certificate of incorporation.

Listing

Our common stock is listed on Nasdaq under the symbol "COMM".

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

Table of Contents

PLAN OF DISTRIBUTION

The selling stockholders may offer and sell the securities covered by this prospectus from time to time in one or more transactions, including without limitation:

directly to one or more purchasers;

through agents;

to or through underwriters, brokers or dealers; or

through a combination of any of these methods.

In addition, the manner in which the selling stockholders may sell some or all of the securities covered by this prospectus includes any method permitted by law, including, without limitation, through:

a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;

purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;

ordinary brokerage transactions and transactions in which a broker solicits purchasers; or

privately negotiated transactions.

The selling stockholders may also enter into hedging transactions. For example, the selling stockholders may:

enter into transactions with a broker-dealer or affiliate thereof in connection with which such broker-dealer or affiliate will engage in short sales of the common stock pursuant to this prospectus, in which case such broker-dealer or affiliate may use shares of common stock received from the selling stockholders to close out its short positions;

sell securities short and redeliver such shares to close out the short positions;

enter into option or other types of transactions that require the selling stockholders to deliver common stock to a broker-dealer or an affiliate thereof, who will then resell or transfer the common stock under this

prospectus; or

loan or pledge the common stock to a broker-dealer or an affiliate thereof, who may sell the loaned shares or, in an event of default in the case of a pledge, sell the pledged shares pursuant to this prospectus.

The securities covered by this prospectus may be sold:

on a national securities exchange;

in the over-the-counter market; or

in transactions otherwise than on an exchange or in the over-the-counter market, or in combination.

In addition, the selling stockholders may enter into derivative or hedging transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. In connection with such a transaction, the third parties may sell securities covered by and pursuant to this prospectus and an applicable prospectus supplement or pricing supplement, as the case may be. If so, the third party may use securities borrowed from the selling stockholders or others to settle such sales and may use securities received from the selling stockholders to close out any related short positions. The selling stockholders may also loan or pledge securities covered by this prospectus and an applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement or pricing supplement, as the case may be.

Table of Contents

A prospectus supplement with respect to each offering of securities will state the terms of the offering of the securities, including:

the name or names of any participating underwriters, brokers, dealers or agents and the amounts of securities underwritten or purchased by each of them, if any;

the public offering price or purchase price of the securities and the net proceeds to be received by the selling stockholders from the sale;

any delayed delivery arrangements;

any underwriting discounts, commissions or agency fees and other items constituting underwriters', brokers', dealers' or agents' compensation;

any discounts or concessions allowed or reallowed or paid to dealers;

any securities exchange or markets on which the securities may be listed; and

other material terms of the offering.

The offer and sale of the securities described in this prospectus by the selling stockholders, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

at a fixed price or prices, which may be changed;

at market prices prevailing at the time of sale;

at prices related to the prevailing market prices; or

at negotiated prices.

In addition to selling its common stock under this prospectus, a selling stockholder may:

transfer its common stock in other ways not involving market maker or established trading markets, including directly by gift, distribution, or other transfer;

sell its common stock under Rule 144 or Rule 145 of the Securities Act rather than under this prospectus, if the transaction meets the requirements of Rule 144 or Rule 145; or

sell its common stock by any other legally available means.

General

Any public offering price and any discounts, commissions, concessions or other items constituting compensation allowed or reallocated or paid to underwriters, dealers, agents or remarketing firms may be changed from time to time. Any selling stockholders, underwriters, dealers, agents and remarketing firms that participate in the distribution of the offered securities may be underwriters as defined in the Securities Act. Any discounts or commissions they receive from the selling stockholders and any profits they receive on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. The selling stockholders will identify any underwriters, agents or dealers and describe their commissions, fees or discounts in the applicable prospectus supplement or pricing supplement, as the case may be.

The selling stockholders and other persons participating in the sale or distribution of the securities will be subject to applicable provisions of the Exchange Act, and the rules and regulations thereunder, including Regulation M. This regulation may limit the timing of purchases and sales of any of the securities by the selling stockholders or any other person. The anti-manipulation rules under the Exchange Act may apply to sales of securities in the market and to the activities of the selling stockholders and any affiliates of the selling stockholders. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution for a

Table of Contents

period of up to five business days before the distribution. These restrictions may affect the marketability of the securities and the ability of any person or entity to engage in market-making activities with respect to the securities.

The selling stockholders are not restricted as to the price or prices at which they may sell the securities. Sales of such securities may have an adverse effect on the market price of the securities.

Moreover, it is possible that a significant number of shares of common stock could be sold at the same time, which may have an adverse effect on the market price of the securities.

We cannot assure you that the selling stockholders will sell all or any portion of the securities offered hereby.

Underwriters and Agents

If underwriters are used in a sale, they will acquire the offered securities for their own account. The underwriters may resell the offered securities in one or more transactions, including negotiated transactions. These sales may be made at a fixed public offering price or prices, which may be changed, at market prices prevailing at the time of the sale, at prices related to such prevailing market prices or at negotiated prices. The selling stockholders may offer the securities to the public through an underwriting syndicate or through a single underwriter. The underwriters in any particular offering will be mentioned in the applicable prospectus supplement or pricing supplement, as the case may be.

Unless otherwise specified in connection with any particular offering of securities, the obligations of the underwriters to purchase the offered securities will be subject to certain conditions contained in an underwriting agreement that we and the applicable selling stockholders will enter into with the underwriters at the time of the sale to them. The underwriters will be obligated to purchase all of the securities of the series offered if any of the securities are purchased, unless otherwise specified in connection with any particular offering of securities. Any initial offering price and any discounts or concessions allowed, reallocated or paid to dealers may be changed from time to time.

The selling stockholders may designate agents to sell the offered securities. Unless otherwise specified in connection with any particular offering of securities, the agents will agree to use their best efforts to solicit purchases for the period of their appointment. The selling stockholders may also sell the offered securities to one or more remarketing firms, acting as principals for their own accounts or as agents for us or any selling stockholders. These firms will remarket the offered securities upon purchasing them in accordance with a redemption or repayment pursuant to the terms of the offered securities. A prospectus supplement or pricing supplement, as the case may be will identify any remarketing firm and will describe the terms of its agreement, if any, with the selling stockholders and its compensation.

In connection with offerings made through underwriters or agents, the selling stockholders may enter into agreements with such underwriters or agents pursuant to which the selling stockholders receive outstanding securities in consideration for the securities being offered to the public for cash. In connection with these arrangements, the underwriters or agents may also sell securities covered by this prospectus to hedge their positions in these outstanding securities, including in short sale transactions. If so, the underwriters or agents may use the securities received from the selling stockholders under these arrangements to close out any related open borrowings of securities.

Dealers

The selling stockholders may sell the offered securities to dealers as principals. The selling stockholders may negotiate and pay dealers' commissions, discounts or concessions for their services. The dealer may then

Table of Contents

resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with the selling stockholders at the time of resale. Dealers engaged by the selling stockholders may allow other dealers to participate in resales.

Direct Sales

The selling stockholders may choose to sell the offered securities directly. In this case, no underwriters or agents would be involved.

Institutional Purchasers

The selling stockholders may authorize agents, dealers or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement or pricing supplement, as the case may be will provide the details of any such arrangement, including the offering price and commissions payable on the solicitations.

The selling stockholders will enter into such delayed contracts only with institutional purchasers that the selling stockholders approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions.

Indemnification; Other Relationships

We and the selling stockholders may have agreements with agents, underwriters, dealers and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act. Agents, underwriters, dealers and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, the selling stockholders in the ordinary course of business. This includes commercial banking and investment banking transactions.

We may agree to indemnify in certain circumstances the selling stockholders against certain liabilities, including liabilities under the Securities Act. The selling stockholders may agree to indemnify us in certain circumstances against certain liabilities, including liabilities under the Securities Act.

Market-Making, Stabilization and Other Transactions

In connection with any offering of common stock, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, syndicate covering transactions and stabilizing transactions. Short sales involve syndicate sales of common stock in excess of the number of shares to be purchased by the underwriters in the offering, which creates a syndicate short position. Covered short sales are sales of shares made in an amount up to the number of shares represented by the underwriters' over-allotment option. In determining the source of shares to close out the covered syndicate short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Transactions to close out the covered syndicate short involve either purchases of the common stock in the open market after the distribution has been completed or the exercise of the over-allotment option. The underwriters may also make naked short sales of shares in excess of the overallotment option. The underwriters must close out any naked short position by purchasing shares of common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors

who purchase in the offering. Stabilizing transactions consist of bids for or purchases of shares in the open market while the offering is in progress for the purpose of pegging, fixing or maintaining the price of the securities.

Table of Contents

In connection with any offering, the underwriters may also engage in penalty bids. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Fees and Commissions

We will pay the expenses, other than underwriting discounts and commissions, associated with the registration and sale of shares to be sold by the selling stockholders. The selling stockholders will pay any underwriting discounts, selling commissions or other minor expenses.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Latham & Watkins LLP.

EXPERTS

The consolidated financial statements of CommScope Holding Company Inc. (the Company) appearing in the Company's Annual Report (Form 10-K) for the year ended December 31, 2014 (including the schedule appearing therein), and the effectiveness of the Company's internal control over financial reporting as of December 31, 2014 (excluding the internal control over financial reporting of Alifabs), have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in its reports thereon (which as to the report on the effectiveness of the Company's internal control over financial reporting contains an explanatory paragraph describing the above referenced exclusion of Alifabs from the scope of such firm's audit of internal control over financial reporting), included therein, and incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the reports of Ernst & Young LLP pertaining to such financial statements and the effectiveness of our internal control over financial reporting as of the respective dates (to the extent covered by consents filed with the Securities and Exchange Commission) given on the authority of such firm as experts in accounting and auditing.

The combined financial statements, incorporated in this Prospectus by reference, of the Broadband Network Solutions business of TE Connectivity Ltd. as of September 26, 2014 and September 27, 2013, and for each of the fiscal years in the three-year period ended September 26, 2014, have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report, which is incorporated herein by reference, and are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Table of Contents

10,000,000 shares

CommScope Holding Company, Inc.

Common stock

Prospectus supplement

Credit Suisse

September 20, 2016