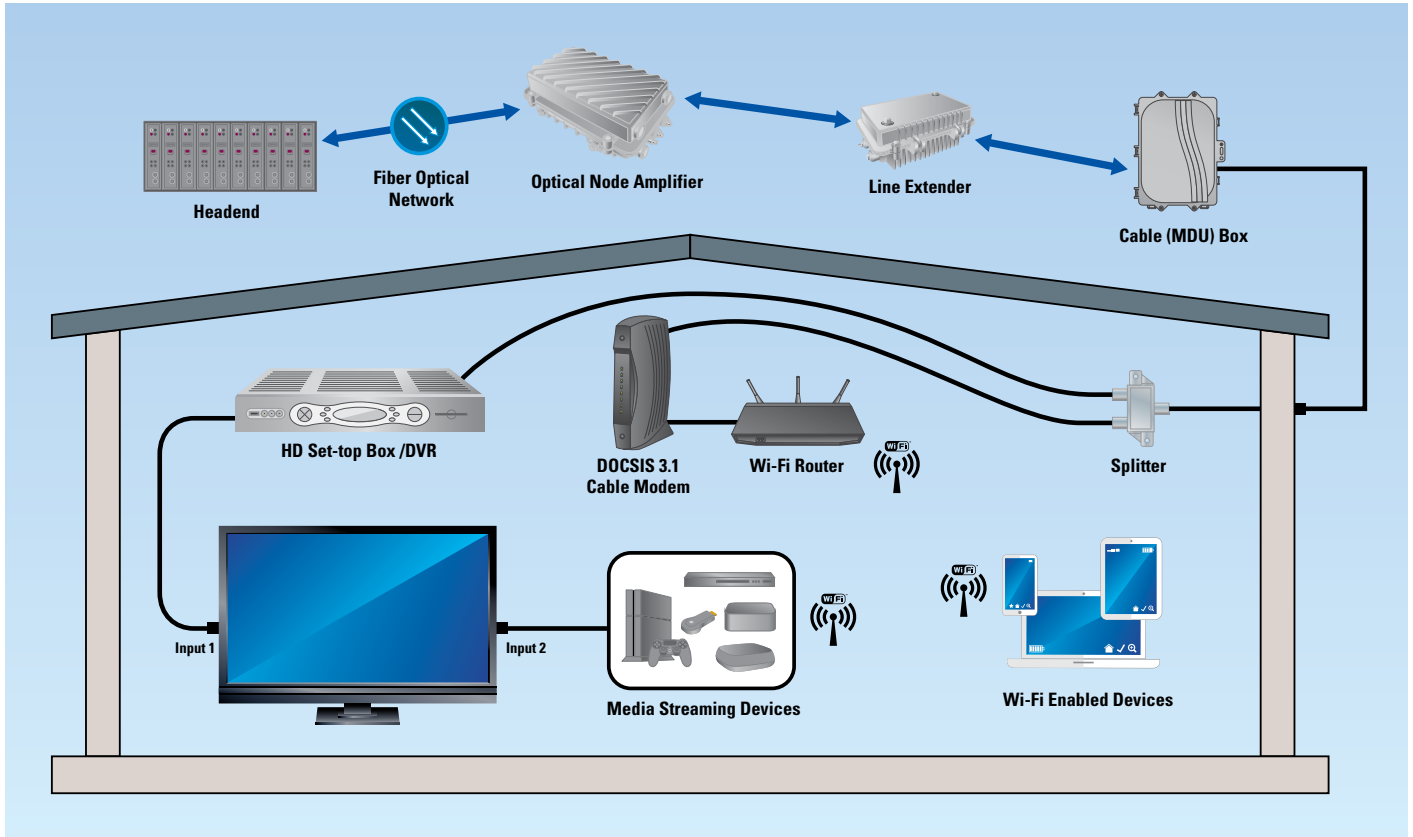


# IDT Products for Wired Broadband Applications



## KEY APPLICATIONS

- CATV headend
- Fiber PON / Optical node networks
- Optical node amplifiers
- Cable (MDU) box
- HD/Set-top box/DVR
- DOCSIS 3.1 cable modem
- Wi-Fi router
- Media streaming devices
- Consumer handheld devices

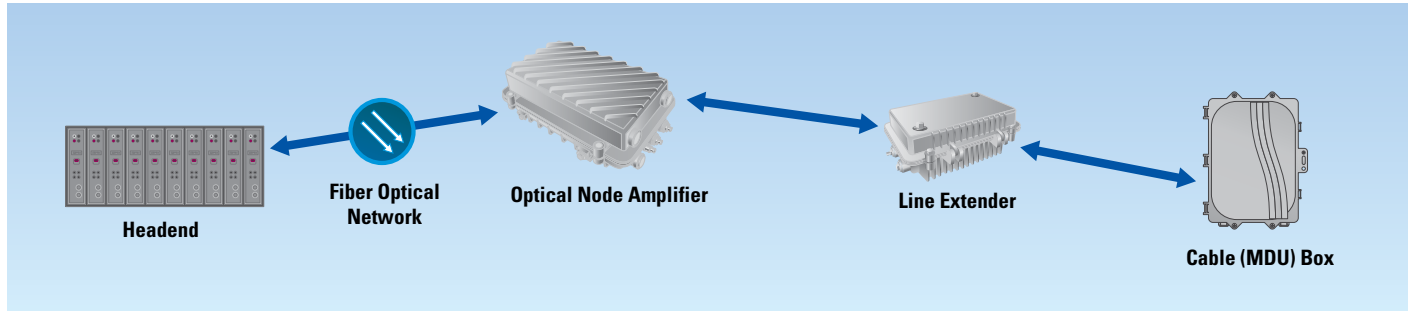
IDT's technology can be found across the entire CATV/broadband wired ecosystem, from the headend, throughout the distribution network and on to the home. Our world-class timing, RF, sensor and wireless power devices deliver the performance needed for a broad array of applications, from media streaming devices to fiber optical networks.

IDT offers timing products ranging from low-jitter, short lead-time crystal oscillators to JESD204B timing and low jitter programmable clocks. Our low-loss RF devices deliver high isolation and high linearity to achieve the higher DOCSIS 3.1 data rates of 10 Gbps downstream and 1 Gbps upstream, all required for today's demanding CATV/Broadband applications.

And IDT's advanced wireless power receivers offer uniquely rich user experiences to meet the high expectations of today's consumer.



# Wired Broadband Applications

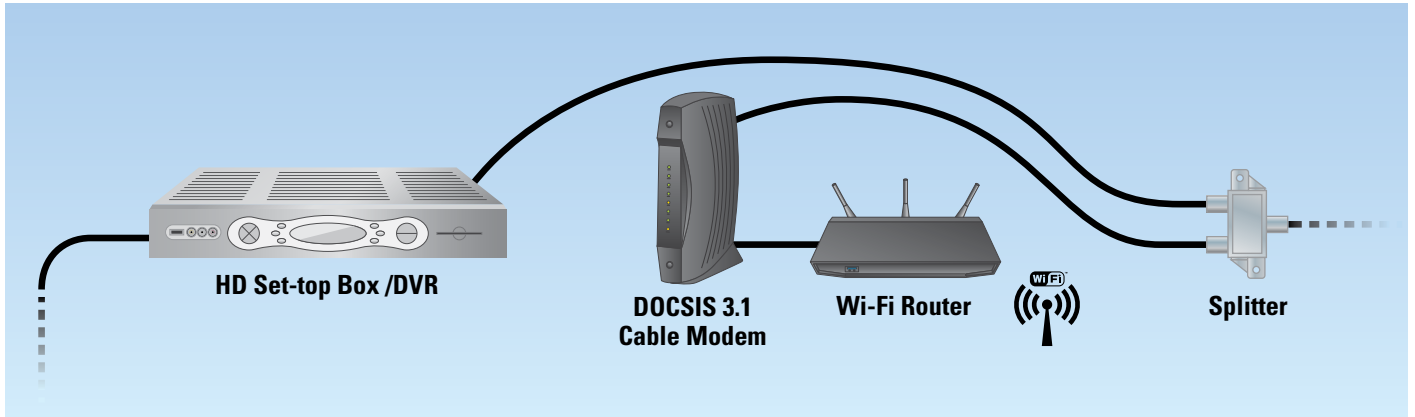


## IDT Products for Headend, Fiberoptic Network, Optical Node Amplifier, Line Extender and Cable (MDU) Box

Part Number	Product Type	Description	Subsystem	Benefit
<b>RF Products</b>				
F1975	Digital Step Attenuator	6-bit 0.5 dB, 75 $\Omega$ DSA, pin-compatible drop in	Headend, Fiber Optical Network, Optical Node Amplifier, Line Extender, Cable (MDU) Box	Glitch-Free™ technology
F1977	Digital Step Attenuator	7-bit 0.25 dB, 75 $\Omega$ DSA	Headend, Fiber Optical Network, Optical Node Amplifier, Line Extender, Cable (MDU) Box	Glitch-Free technology
F2972	Switch	75 $\Omega$ SPDTR, pin-compatible drop in	Headend	Low loss, high isolation, low distortion
F2970	Switch	75 $\Omega$ SPDTA, pin-compatible drop in	Headend, Fiber Optical Network, Optical Node Amplifier, Line Extender, Cable (MDU) Box	Low loss, high isolation, low distortion
F2976	Switch	75 $\Omega$ SPDTR, pin-compatible drop in	Headend	Low loss, high isolation, low distortion
F2270	Variable Voltage Attenuator	75 $\Omega$ VVA, pin-compatible drop in	Headend, Fiber Optical Network, Optical Node Amplifier, Line Extender, Cable (MDU) Box	Low loss, high isolation, high linearity
<b>Clock Generators</b>				
5P49Vxxxx	Programmable Clock Generator	Low Power Programmable Clock Generator, 1 to 350 MHz	Headend	500/700 fs phase noise
8T49N24x 8T49N28x	FemtoClock® NG Universal Frequency Translator	Programmable Clock Generator/ Jitter Attenuator, 8 kHz to 1 GHz	Headend	300 fs phase noise, 4/8 outputs
<b>RF Timing</b>				
8V97051L 8V97053L	RF Synthesizer/PLL	Wideband RF Synthesizer/PLL with integrated VCO	Headend, Cable (MDU) Box	Low phase noise, low spurs, low power, wideband VCO
8V19N474	RF/JESD204B Clock Synthesizer/Jitter Attenuator	Dual loop high performance clock generator with jitter attenuation	Headend, 10/40/100/400 GbE Fiber Optical Network Cable/DOCSIS, Cable (MDU) Box	Very low integrated jitter, redundancy, large fanout, multiple frequency domains
<b>Sync Timing</b>				
8T49N24x 8T49N28x	FemtoClock® NG Universal Frequency Translator	Jitter Attenuator, 8 kHz to 1 GHz, Port Synchronizer	MDU	300 fs phase noise, 4/8 outputs
82P337xx 82P338xx	IEEE 1588 and 10G/40G SyncE Timing Source	System Synchronizer, Port Synchronizer	MDU	Synchronize 1588, ethernet and system clocks
<b>Oscillators</b>				
XL and XU family	Crystal Oscillator	Crystal Oscillator 0.016 to 1500 MHz, LVPECL, LVDS, HCSL, CMOS outputs	Headend	Low jitter, short lead time



# Wired Broadband Applications

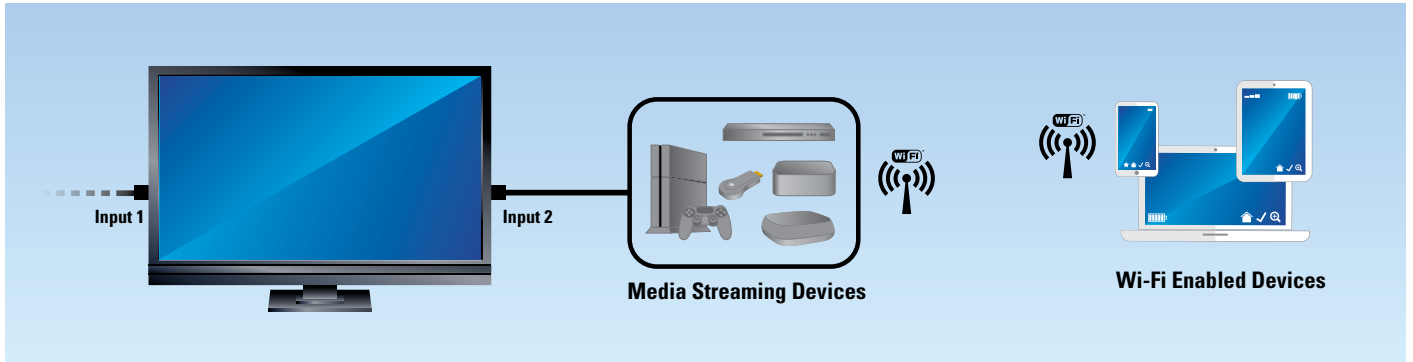


## IDT Products for HD Set Top Box, DOCSIS 3.1 Cable Modem and Wi-Fi Router

Part Number	Product Type	Description	Subsystem	Benefit
<b>RF Products</b>				
F2972	Switch	5 to 3000 MHz, SPDTR	Set-top box	Low loss, high isolation, low distortion
F2976	Switch	5 to 3000 MHz, SPDTR	Set-top box	Low loss, high isolation, low distortion
<b>Clock Generators</b>				
5P49Vxxx	Programmable Clock Generator	Low Power Programmable Clock Generator, 1 to 350 MHz	Set-top Box, Cable Modem, Wi-Fi Router	500/700 fs phase noise, 2 to 4 outputs
8T49N24x 8T49N28x	FemtoClock NG Universal Frequency Translator	Programmable Clock Generator/ Jitter Attenuator, 8 kHz to 1 GHz	Set-top Box, Cable Modem, Wi-Fi Router	300 fs phase noise, 4/8 outputs
<b>RF Timing</b>				
8V97051	RF Synthesizer/PLL	Low Power Wideband Fractional RF Synthesizer, 34.375 to 4400 MHz	Set-top Box, Cable Modem	Low phase noise
8V97051L 8V97053L	RF Synthesizer/PLL	Wideband RF Synthesizer/PLL with integrated VCO	HD Set-top Box/DVR, DOCSIS 3.1 Cable Modem	Low phase noise, low spurs, low power, wideband VCO
8V19N474	RF/Clock Synthesizer/ JitterAttenuator	Dual loop high performance clock generator with jitter attenuation	DOCSIS 3.1 Cable Modem	Very Low integrated jitter, redundancy, Large fanout, Multiple frequency domains
<b>Oscillators</b>				
XL and XU family	Crystal Oscillator	Crystal Oscillator 0.016 to 1500 MHz, LVPECL, LVDS, HCSL, CMOS outputs	Set-top Box, Cable Modem, Wi-Fi Router	Low jitter, short lead time



# Wired Broadband Applications



## IDT Products for HD Televisions, Media Streaming Devices and Wi-Fi Enabled Devices

Part Number	Product Type	Description	Subsystem	Benefit
<b>Wireless Power</b>				
P9025AC-R	Wireless Power Receiver	5W, Qi-compliant Wireless Power Receiver	Wi-Fi Enabled Devices	Small form factor, high efficiency, easy-to-use reference design
P9038-R	Wireless Power Transmitter	5W, Qi-compliant Wireless Power Transmitter	Wi-Fi Enabled Devices	Reduced form factor, high efficiency, easy-to-use reference design
<b>Clock Generators</b>				
5P49Vxxxx	Programmable Clock Generator	Low Power Programmable Clock Generator, 1 MHz to 350 MHz	Media Streaming	500/700 fs phase noise, 2 to 4 outputs
<b>Oscillators</b>				
XL and XU family	Crystal Oscillator	Crystal Oscillator 0.016 to 1500 MHz, LVPECL, LVDS, HCSL, CMOS outputs	Media Streaming, Wi-Fi Enabled Devices	Low jitter, short lead time

To request samples, download documentation, or learn more, visit: [idt.com](http://idt.com)