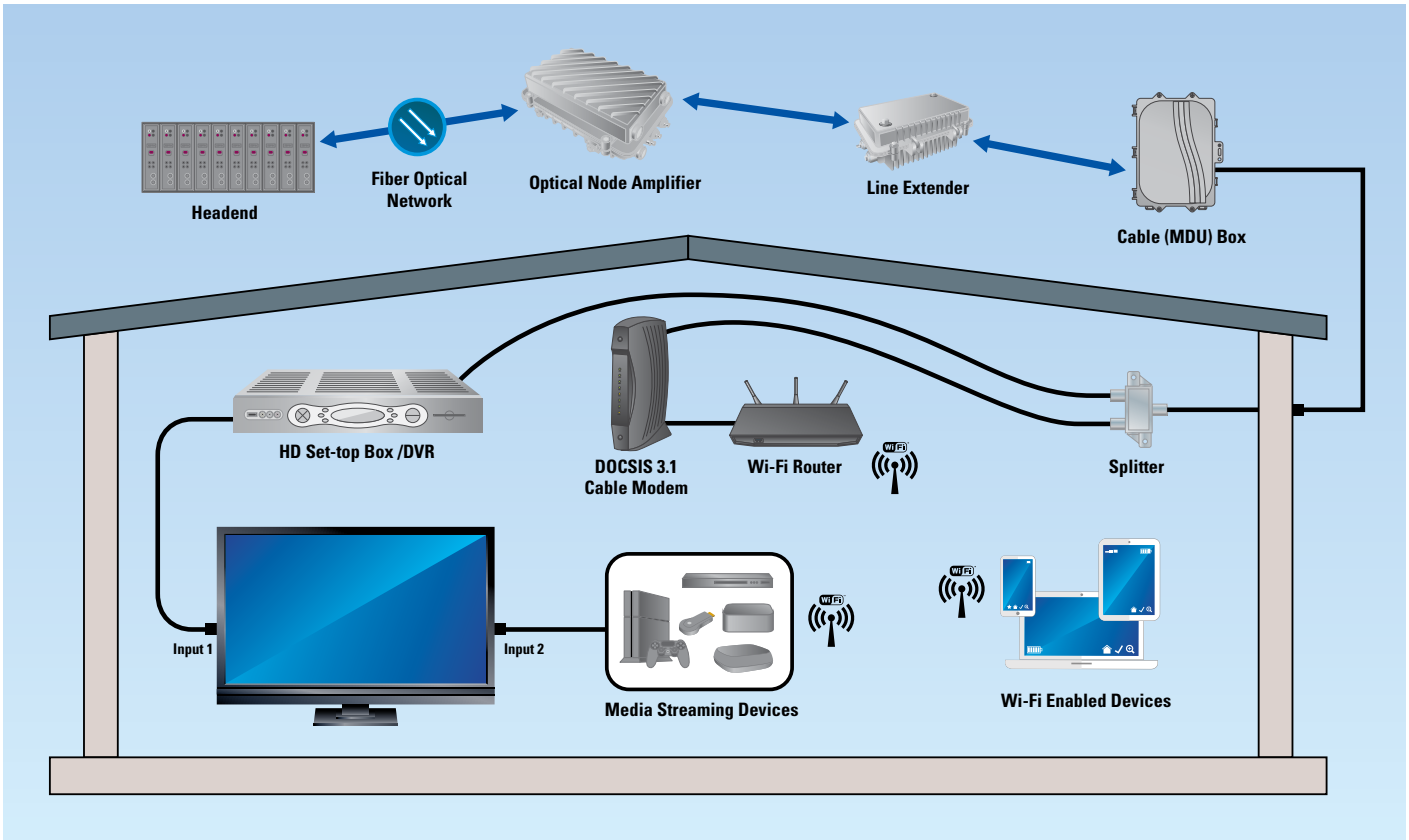
IDT Products for Wired Broadband Applications



KEY APPLICATIONS

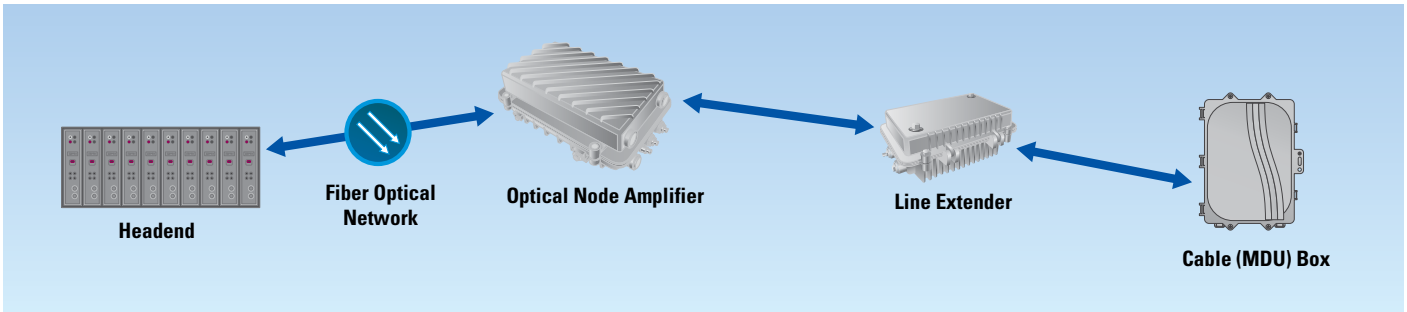
- CATV headend
- Fiber PON / Optical node networks
- Optical node amplifiers
- Cable (MDU) box
- HD/Set-top box/DVR
- DOCSIS 3.1 cable modem
- Wi-Fi router
- Media streaming devices
- Consumer handheld devices

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 optic 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.

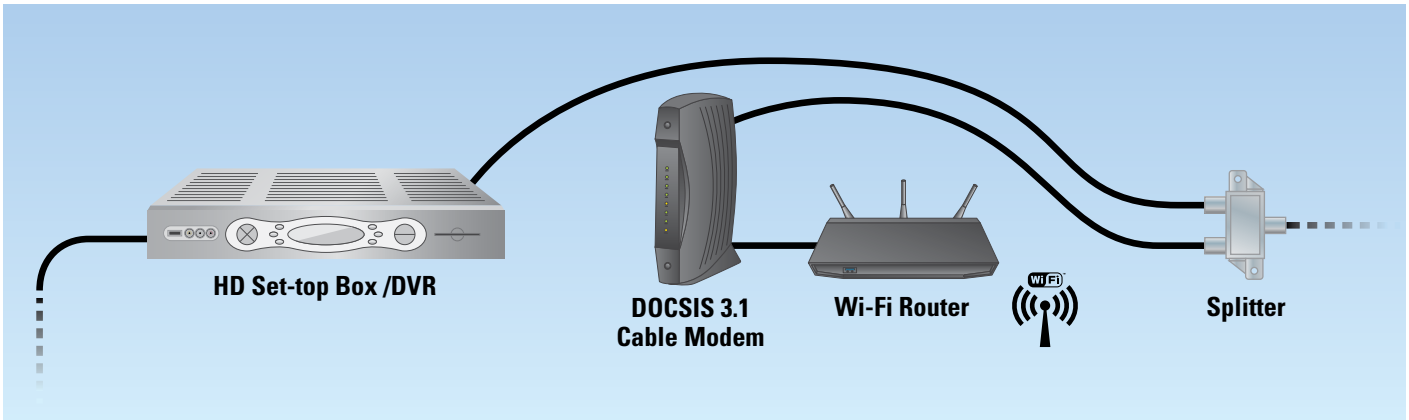
Wired Broadband Applications



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

Part Number	Product Type	Description	Subsystem	Benefit
RF Products				
F1975	Digital Step Attenuator	6-bit 0.5 dB, 75 Ω 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 Ω DSA	Headend, Fiber Optical Network, Optical Node Amplifier, Line Extender, Cable (MDU) Box	Glitch-Free technology
F2972	Switch	75 Ω SPDTR, pin-compatible drop in	Headend	Low loss, high isolation, low distortion
F2970	Switch	75 Ω 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 Ω SPDTR, pin-compatible drop in	Headend	Low loss, high isolation, low distortion
F2270	Variable Voltage Attenuator	75 Ω VVA, pin-compatible drop in	Headend, Fiber Optical Network, Optical Node Amplifier, Line Extender, Cable (MDU) Box	Low loss, high isolation, high linearity
Clock Generators				
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
RF Timing				
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
Sync Timing				
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
Oscillators				
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
RF Products				
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
Clock Generators				
5P49Vxxxx	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
RF Timing				
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
Oscillators				
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

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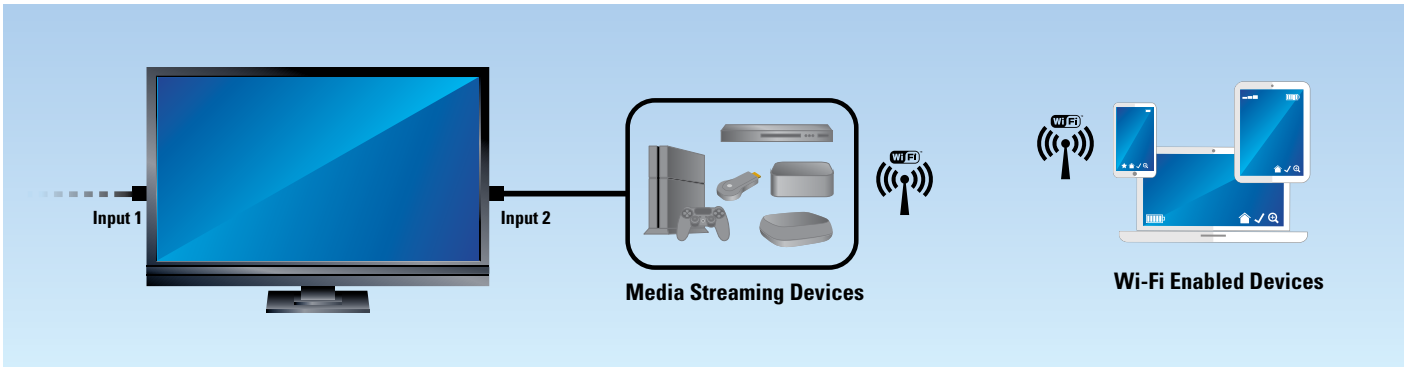

IDT Products for HD Televisions, Media Streaming Devices and Wi-Fi Enabled Devices

Part Number	Product Type	Description	Subsystem	Benefit
Wireless Power				
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
Clock Generators				
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
Oscillators				
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**