

CYPRESS PRODUCT SELECTOR GUIDE PHYSICAL LAYER DEVICES

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PHYSICAL LAYER DEVICES

MULTI-PROTOCOL PHYs

Cypress has the broadest and most flexible portfolio of backplane physical layer (PHY) devices, covering data transmission rates of 50 Mbps to 1.5 Gbps. These flexible devices are ideal for proprietary serial backplane applications. They also comply with many industry standards such as:

- Gigabit Ethernet
- Fibre Channel
- Enterprise System Connection (ESCON)
- Digital Video Broadcast–Asynchronous Serial Interface (DVB–ASI)
- Society of Motion Picture & Television Engineers (SMPTE), SMPTE 292M, SMPTE 259M, SMPTE 344

Key Applications: Military aircraft, controls, and accessories, industrial communications and controls, medical information transmission, wireless basestations, data communications/networking, storage, and broadcast.

1.5 Gbps Transceivers

Part Number	Status	Features	Frequency Range	Standard	Package	Pins/Ball	SMD #	Temperature Range
CYP15G0101DXB	Active	8B/10B, Redundancy, BIST, JTAG	0.2 to 1.5 Gbps	Ethernet, Fibre Channel, ESCON, DVB-ASI	FBGA	100	N/A	0C to +70C
CYP15G0201DXB	Active	Channel Bonding, 8B/10B, Redundancy, BIST, JTAG	0.2 to 1.5 Gbps	Ethernet, Fibre Channel, ESCON, DVB-ASI	FBGA	196	N/A	0C to +70C
CYP15G0401DXB	Active	Channel Bonding, 8B/10B, Redundancy, BIST, JTAG	0.2 to 1.5 Gbps	Ethernet, Fibre Channel, ESCON, DVB-ASI	BGA	256	N/A	0C to +70C
CYP15G0402DXB	Active	Redundancy, BIST, JTAG	0.2 to 1.5 Gbps	Ethernet, Fibre Channel, ESCON, DVB-ASI	BGA	256	N/A	0C to +70C
CYP15G0403DXB	Active	Independent Clocking, 8B/10B, Redundancy, BIST, JTAG	0.2 to 1.5 Gbps	Ethernet, Fibre Channel, ESCON, DVB-ASI	BGA	256	N/A	0C to +70C
CYP15G0401RB	Active	Quad Channel HOTLink II Receiver	0.2 to 1.5 Gbps	Ethernet, Fibre Channel, ESCON, DVB-ASI	BGA	256	N/A	0C to +70C
CYP15G0401TB	Active	Quad Channel HOTLink II Transmitter	0.2 to 1.5 Gbps	Ethernet, Fibre Channel, ESCON, DVB-ASI	BGA	256	N/A	0C to +70C

SONET and SDH PHYs

Cypress offers a family of high performance, SONET/SDH physical layer (PHY) and framing devices that operate at OC-1 (51.85 Mbps), OC-3 (155.52 Mbps), and OC-48 (2.488 Gbps).

OC-48 SERDES

Part Number	Status	Features	Standard	Frequency Range	Package	Pins/Ball	SMD #	Temperature Range
CYS25G0101DX	NRND	Integrated 2.488Gbps SERDES and CDR, Loop-back Testing	ATM/IP/SONET/SDH	2.488 Gbps	TQFP	120	N/A	0C to +70C

NRND = Not Recommended for New Designs

VIDEO (SMPTE) PHYs

Cypress supplies a chipset for the transmission of digital video signals. This chipset is based on our popular HOTLink family and complies with the Society of Motion Picture & Television Engineers (SMPTE) video encoding, SMPTE-259M, and Digital Video Broadcasting (DVB) standards.

Multi-Format HD/SD/DVB-ASI Equalizer

Part Number	Status	Features	Package	Pins/Ball	Standard	Frequency Range	Temperature Range
CYV15G0100EQ	Active	Multi-Format HD/SD/DVB-ASI Equalizer	SOIC	16	SMPTE/DVB-ASI	0.2 to 1.5 Gbps	0C to +70C
CYV15G0101EQ	Active	Multi-Format HD/SD/DVB-ASI Equalizer	SOIC	16	SMPTE/DVB-ASI	0.2 to 1.5 Gbps	0C to +70C
CYV15G0103EQ	Active	Multi-Format HD/SD/DVB-ASI Equalizer	QFN	16	SMPTE/DVB-ASI	0.2 to 1.5 Gbps	0C to +70C
CYV15G0104EQ	Active	Multi-Format HD/SD/DVB-ASI Equalizer	QFN	16	SMPTE/DVB-ASI	0.2 to 1.5 Gbps	0C to +70C
CYV270M0101EQ	Active	Multi-Format SD/DVB-ASI Equalizer	SOIC	16	SMPTE/DVB-ASI	270 Mbps	0C to +70C
CYV270M0104EQ	Active	Multi-Format SD/DVB-ASI Equalizer	QFN	16	SMPTE/DVB-ASI	270 Mbps	0C to +70C

SMPTE

Part Number	Features	Package	Pins/Ball	Standard	Frequency Range	SMD #	Temperature Range
CY24130	SMPTE Receiver Training Clock	TSSOP	16	SMPTE	400 MHz	N/A	0C to +70C
CY7B9234	8B/10B encoded or 10-bit unencoded/DVB-ASI and SMPTE-259M-BCD compliant chipset	PLCC	28	DVB/SMPTE	270 MHz	N/A	0C to +70C
CY7B9234	8B/10B encoded or 10-bit unencoded/DVB-ASI and SMPTE-259M-BCD compliant chipset	PLCC, Tape & Reel	28	DVB/SMPTE	270 MHz	N/A	0C to +70C
CY7B9334	8B/10B encoded or 10-bit unencoded/DVB-ASI and SMPTE-259M-BCD compliant chipset	PLCC	28	DVB/SMPTE	270 Mbps	N/A	0C to +70C
CY7B9334	8B/10B encoded or 10-bit unencoded/DVB-ASI and SMPTE-259M-BCD compliant chipset	PLCC, Tape & Reel	28	DVB/SMPTE	270 Mbps	N/A	0C to +70C
CY7C9235	8B/10B encoded or 10-bit unencoded/DVB-ASI and SMPTE-259M-BCD compliant chipset	PLCC	44	DVB/SMPTE	270 Mbps	N/A	0C to +70C
CY7C9235A	8B/10B encoded or 10-bit unencoded/DVB-ASI and SMPTE-259M-BCD compliant chipset	PLCC	44	DVB/SMPTE	270 Mbps	N/A	0C to +70C
CY7C9335	8B/10B encoded or 10-bit unencoded/DVB-ASI and SMPTE-259M-BCD compliant chipset	TQFP	100	DVB/SMPTE	270 Mbps	N/A	0C to +70C
CY7C9335A	8B/10B encoded or 10-bit unencoded/DVB-ASI and SMPTE-259M-BCD compliant chipset	TQFP	100	DVB/SMPTE	270 Mbps	N/A	0C to +70C
CYV15G0101DXB	SMPTE 259M/292M, DVB-ASI serdes	BGA	256	DVB/SMPTE	0.2 to 1.5 Gbps	N/A	0C to +70C
CYV15G0101DXB	SMPTE 259M/292M, DVB-ASI serdes	BGA	256	DVB/SMPTE	0.2 to 1.5 Gbps	N/A	-40C to +85C
CYV15G0104TRB	SMPTE 259M/292M Single Independent Serializer + Retlocking Deserializer	Thermally Enhanced BGA	256	SMPTE	0.2 to 1.5 Gbps		0C to +70C
CYV15G0203TB	SMPTE 259M/292M Dual Independent Serializer	Thermally Enhanced BGA	256	SMPTE	0.2 to 1.5 Gbps		0C to +70C
CYV15G0204RB	SMPTE 259M/292M Dual Independent Retlocking Deserializer	Thermally Enhanced BGA	256	SMPTE	0.2 to 1.5 Gbps		0C to +70C
CYV15G0204TRB	SMPTE 259M/292M Dual Independent Serializer + Retlocking Deserializer	Thermally Enhanced BGA	256	SMPTE	0.2 to 1.5 Gbps		0C to +70C
CYV15G0401DXB	SMPTE 259M/292M, DVB-ASI serdes	BGA	256	DVB/SMPTE	0.2 to 1.5 Gbps	N/A	0C to +70C
CYV15G0403DXB	SMPTE 259M/292M, DVB-ASI serdes	BGA	256	DVB/SMPTE	0.2 to 1.5 Gbps	N/A	0C to +70C
CYV15G0403TB	SMPTE 259M/292M Quad Independent Serializer	Thermally Enhanced BGA	256	SMPTE	0.2 to 1.5 Gbps		0C to +70C
CYV15G0404DXB	DVB-ASI, SMPTE-259M-BCD, SMPTE-292M Independent Channel with Retlockers device	Thermally Enhanced BGA	256	SMPTE	0.2 to 1.5 Gbps		0C to +70C
CYV15G0404RB	SMPTE 259M/292M Quad Independent Retlocking Deserializer	Thermally Enhanced BGA	256	SMPTE	0.2 to 1.5 Gbps		0C to +70C

CONTACT US

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