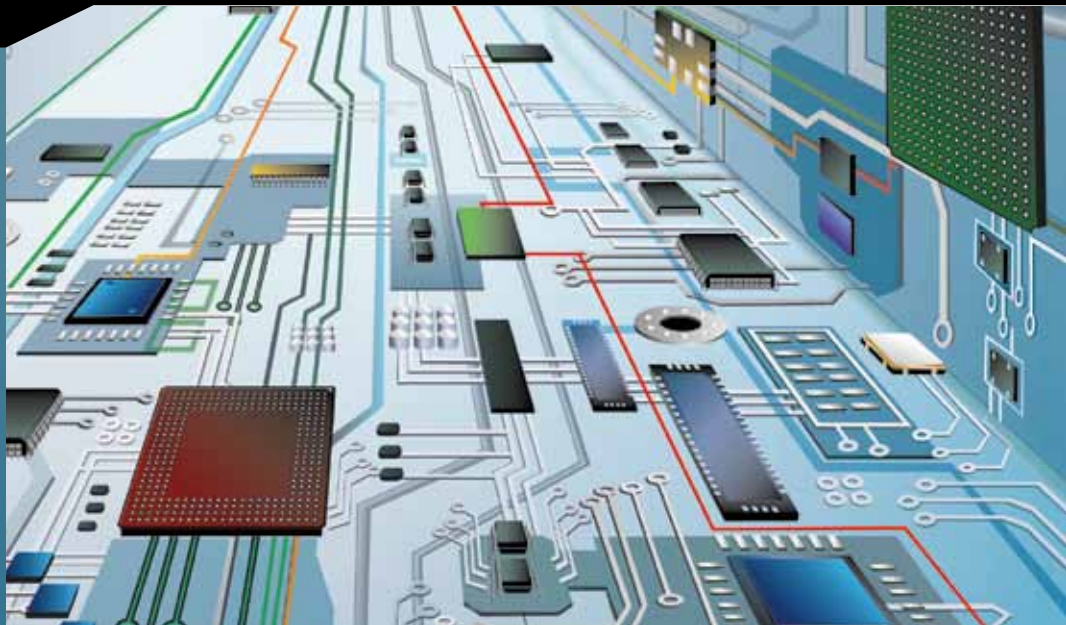


Pericom Solutions in Connectivity | Signal Integrity | Timing



Pericom Semiconductor enables serial connectivity with the industry's most complete solutions for the computing, communications and consumer market segments. With products spanning analog, digital and mixed-signal integrated circuits, power management solutions and quartz-based frequency control products (FCP), Pericom supplies essential solutions for the timing, switching, bridging and conditioning of high-speed signals required by today's ever-increasing speed and bandwidth demanding applications.

Why Choose Pericom?

- Broad portfolio of vertically integrated connectivity, signal integrity and timing solutions
- Standards compliance, increased system reliability, and lowered system costs
- Unique signal conditioning solutions enable the full potential of the latest high-speed serial protocols

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PRODUCT OVERVIEW

CONNECTIVITY

SIGNAL
INTEGRITY

TIMING



Connectivity and Switches Solutions from Pericom

Electronics today are fast – the signals that drive them run at increasingly higher speeds. Most commonly this is done using a serial bus, or high-speed circuit board, which connects components in computers and consumer devices. The bus uses serial signals, such as PCI Express® or USB, to quickly send data in a single stream from one point to another.

To address the specific design challenges posed by high-speed connectivity in electronic design - like digital video, wireless and ultra-mobility applications - Pericom offers a broad portfolio of ICs, crystals and crystal oscillators for high-speed standards including PCI Express, HDMI/DVI, DisplayPort, USB, Gigabit Ethernet, 10 Gigabit Ethernet, EPON, GPON, SATA/SAS and Fibre Channel.

Pericom's PCI Express products enables for signal quality, system performance, flexibility, reliability, system timing, EMI, express cable, and much more. Uniquely, we offer the industry's broadest portfolio of interface solutions for these high-performance protocols.

- ➔ PCI Express is a point-to-point serial differential low-voltage interconnect
- ➔ Consolidates application requirements for use by multiple market segments
- ➔ A highly flexible, scalable, reliable, and stable high-performance protocol
- ➔ Cost-effective general purpose I/P Architecture
- ➔ Allows for use of new topologies in system and communication design

PCIe Packet Switch, GreenPacket™ & SlimLine™ Families

- PCIe 1.1/ 2.1 3-5 ports/ 3-8 lanes concurrent packet switching, Lowest Latency
- Customer programmable PHY, switching and EEPROM configurable
- QFP, QFN packages-- Smallest footprint, lowest power
- Wider range temperature -40~ +85°C supporting for various applications
- Clock buffer Integration, ease of design
- Peer-to-Peer Data Transfer and Hot-Plug Support

PCIe to USB 2.0 Swidge™

- PCIe to USB 2.0 + PCIe Switch and Bridge in one chip.

PCIe to PCI-X™ Bridge

- Non-transparent mode and fully reversible – high throughput, x4 PCIe lanes
- Customer programmable power management features
- PCIe & PCI-X bus Hot-plug support, supports 128, 256, and 512-byte payloads
- The only PCI-SIG 1.1 compliant PCIe to PCI-X bridge in the market

PCIe to PCI Bridge Family

- Reversible PCIe-to-PCI Bridge with dual priority modes
- Supports isochronous data streaming: real-time/live video
- Small packages: 14x14 LQFP 128-pin (9x113 & 9x118)
- Reverse mode option – outstanding performance (9x113)
- High-output drivers – 8 PCI devices across connectors – industry unique (9x112)
- Support Legacy Mode for CPU Replacement PCI Port (9x113)

PCIe to UART I/O Bridge

- Industry first one-chip PCIe to UART Solution, PCI-SIG 1.1 compliant
- 2, 4, or 8 high-performance 16C950 UART ports
- Perfect for POS, RSxxx applications, embedded industrial controls

PCIe 1.0, 2.0, and 3.0 Signal Switching

- 1.8V and 3.3V, 2 and 4-differential channel, 2:1 mux/demux signal switches
- 1.8V PCIe 2.0/SATA3, SAS2 2-channel, 2:1 mux/demux signal switches
- 3.3V PCIe 2.0/DisplayPort and PCIe 3.0, 10Gbps Ethernet signal switches

PCIe to Video Decoder

- Sync-Tip detection and 5-line comb filter for noise reduction of signal across up to 500 meters
- High-speed 10-bit ADC and independent channel controls
- Stereo audio input with standard 16/18 bit width stereo I2S output - 44.1/48 KHz sampling rates

Switching Solutions

- High speed signal switches for almost all applications
- LAN, USB, DP/HDMI, SATA, SAS, Thunderbolt, VGA, LVDS

Power Management

- Voltage Translators
- LDOs (Low-dropout)
- Power Switches
- MicroProcessor Supervisory ICs

PCI Express Bridges

Part No.	Description	PCI Bus Masters	PCI Speed	PCI Bus Width	Ports	Lanes	Package
PI7C9X111SL	PCIe-to-PCI Reversible Bridge with PowerSave™	4	66 MHz	32-bit	1 PCI	1	128-LQFP (FD128)
PI7C9X112SL	PCIe-to-PCI Bridge with PowerSave™	8	66 MHz	32-bit	1 PCI	1	128-LQFP (FD128)
PI7C9X113SL	PCIe-to-PCI Bridge with PowerSave™ (Legacy Mode)	4	66 MHz	32-bit	1 PCI	1	128-LQFP (FD128)
PI7C9X130	PCIe-to-PCI-X Reversible Bridge	-	133 MHz	64-bit	1 PCI-X	4	256-PBGA (ND256)
PI7C9X7952	PCIe-to-Dual UART I/O Bridge	-	-	-	2 UART	1	128-LQFP (FD128)
PI7C9X7954	PCIe-to-Quad UART I/O Bridge	-	-	-	4 UART	1	128-LQFP (FD128)
PI7C9X7958	PCIe-to-Octal UART I/O Bridge	-	-	-	8 UART	1	160-LFBGA (NB160)
PI7C9X440SL	PCIe-to-USB Host Controller	-	-	-	4 USB	1	128-LQFP (FD128)
PI7C9X442SL	PCIe-to-USB 2.0 Host Controller + PCIe Swidge™	-	-	-	4 USB/ 2 PCIe	3	128-LQFP (FD128)

PCI Express Signal Switches (1.0, 2.0 and 3.0)

Part No.	Volt.	Description	Lanes	Data Rate Gbps	Configuration	Package
PI2PCIE212	1.8V	1.8V PCIe bi-directional signal switch	1	2.5	2:1 Mux/Demux, 2-Differential Channels	28-TQFN (ZH28)
PI2PCIE2212	1.8V	1.8V PCIe 2.0, bi-directional differential 2:1 with single control	1	5	Mux: 2-Differential Channel	28-TQFN (ZH28)
PI2PCIE2214	1.8V	1.8V PCIe 2.0, 1-lane bi-directional differential 4:1	1	5	Mux, 2-Differential Channel	42-TQFN (ZH42)
PI2PCIE2412	1.8V	1.8V PCIe 2.0, bi-directional with single enable	2	5	2:1 Mux/Demux, 4-Differential Channels	42-TQFN (ZH42)
PI2PCIE2422	1.8V	1.8V PCIe 2.0 bi-directional with single enable and bypass mode	2	5	2:1 Mux/Demux with bypass, 4-Differential Channels	42-TQFN (ZH42)
PI2PCIE2442	1.8V	1.8V PCIe 2.0, bi-directional differential 2:2 exchange, single control	2	5	Exchange, 4-Differential Channel	42-TQFN (ZH42)
PI2PCIE412-D	1.8V	1.8V PCIe, bi-directional with single enable and enhanced ESD	2	2.5	2:1 Mux/Demux, 4-Differential Channels	42-TQFN (ZH42)
PI2DBS6212	1.8V	1.8V PCIe 2.0/SAS2/SATA3/XUAI 2:1 Signal Switch	1	6	Mux/Demux 2-Differential Channels	28-TQFN (ZH28)
PI2DDR3212	1.5V -1.8V	DDR3 14-bit 2:1 mux/demux	14	2.33		TQFN-52 (ZL52), TFBGA-48 (NC48)
PI3PCIE2215	3.3V	3.3V PCIe 2.0, bi-directional differential 2:1, with single control	1	5	Mux: 2-Differential Channel	28-TQFN (ZH28)
PI3PCIE2415	3.3V	3.3V PCIe 2.0, dual graphics mux, single enable	2	5	Mux, 2:1: 4-Differential Channel	42-TQFN (ZH42)
PI3PCIE2612-A	3.3V	3.3V PCIe 2.0 / DisplayPort (6-channel), ATX pinout	2	5	Mux, 6-Differential Channels, ATX pinout	56-TQFN (ZF56)
PI3PCIE2612-B	3.3V	3.3V PCIe 2.0 / DisplayPort (6-channel), BTX pinout	2	5	Mux, 6-Differential Channels, BTX pinout	56-TQFN (ZF56)
PI3PCIE3412/15/22	3.3V	3.3V PCIe 3.0, 2-lane, differential 2:1 mux/demux single enable, and bypass option	2	8/10	Mux, 2:1: 4-Differential Channel	42-TQFN (ZH42)
PI3PCIE3212/15	3.3V	3.3V PCIe 3.0, 1-lane, differential 2:1 mux/demux single enable	1	8/10	Mux, 2:1: 2-Differential Channel	20-QFN (ZB20)
PI3PCIE3413	3.3V	3.3V PCIe 3.0, 2-lane, differential 3:1 mux/demux	2	8	Mux, 3:1: 4-Differential Channel	42-TQFN (ZH42)

LAN Switches

Part No.	Description	Voltage	Package
PI3L110	Quad 2:1 Mux (Fast Ethernet)	3.3V	16-TSSOP (L16), 16-QSOP (Q16)
PI3L500/500-A	8-channel 2:1 Mux/ Gigabit Ethernet	3.3V	56-TQFN (ZF56)
PI3L720	8-channel 2:1 Mux/ Gigabit Ethernet	3.3V	48-TSSOP (L48), 48-TVSOP (K48)

PCI Express Packet Switches

Part No.	Description	Protocol	Ports	Lanes	Package
PI7C9X20303SL	3-port, 3-lane, SlimLine™ PCIe Packet Switch with PowerSave™ Technology	PCIe 1.1	3	3	128-LQFP (FD128)
PI7C9X20404SL	4-port, 4-lane, SlimLine™ PCIe Packet Switch with PowerSave™ Technology	PCIe 1.1	4	4	128-LQFP (FD128)
PI7C9X20303UL	3-port, 3-lane, UltraLo™ PCIe Packet Switch with PowerSave™ Technology	PCIe 1.1	3	3	132-TQFN (ZP132)
PI7C9X20505GP	5-port, 5-lane, PCIe Packet Switch with GreenPacket™ Technology	PCIe 1.1	5	5	256-PBGA (ND256)
PI7C9X20508GP	5-port, 8-lane, PCIe Packet Switch with GreenPacket™ Technology	PCIe 1.1	5	8	256-PBGA (ND256)
PI7C9X2G303EL	3-port, 3-lane, ExtremeLo™ PCIe Packet Switch with PowerSave™ Technology	PCIe 2.1	3	3	136-aQFN (ZX136)
PI7C9X2G304SL	3-port, 4-lane, SlimLine™ PCIe Packet Switch with PowerSave™ Technology	PCIe 2.1	3	4	128-LQFP (FD128)
PI7C9X2G404SL	4-port, 4-lane, SlimLine™ PCIe Packet Switch with PowerSave™ Technology	PCIe 2.1	4	4	128-LQFP (FD128)

Power Management - Load Switches

Part No.	Description	Voltage	Lanes	Analog	Single End Channels	Differential Channels	Signal Type	Configuration	Type
PI3PD22919	Load Switch, Active high, 4A, 0.75-3.6V	3.6V	1	Yes	0	0	N/A	N/A	N/A
PI3PD22920	Load Switch, Active high, 4A, 0.75-3.6V	3.6V	1	Yes	0	0	Differential	N/A	N/A

LDO Regulator (Low Drop-Out)

Part No.	Description	LDO Channel	I _{ss} (μA)	I _{out} (mA)	Dropout Voltage
PT7M8202	Ultra-Low-Noise, RF, 300mA LDO Regulator	Single	70	300	270mV @ 300mA
PT7M8205	1.2V to 3.4V output , Low-Noise, 300mA LDO Regulator	Single	65	300	270mV @ 300mA
PT7M8206	1.2V to 3.4V output , Low-Noise, 300mA LDO Regulator	Single	65	300	270mV @ 300mA
PT7M8208	Ultra-small package, 1mm x 1mm UDFN, 300mA LDO Regulator	Single	65	300	270mV @ 300mA
PT7M8216	Low Quiescent Current, Ultra-small package, 0.8mmx0.8mm (1mmx1mm), 200mA LDO Regulator	Single	36	200	150mV @ 150mA
PT7M8220B	Low Dropout 600mA Fixed Voltage Linear Regulator	Single	80	600	150mV @ 300mA
PT7M8411	Dual, 300mA LDO Regulator	Dual	55	300	210mV @ 300mA

USB Charger

Part No.	Description	Analog or Digital?	Voltage	Lanes	Single Ended Channels	Differential Channels	Signal Type	Configuration	Type
PI5USB1457	USB charging controller 1 port for CDP and SDP Support	Mixed Signal	5V	1	0	0	NA	N/A	None
PI5USB2543	USB charging controller with integrated power switch 1 port for CDP and SDP Support	Mixed Signal	5V	1	0	0	NA	None	N/A
PI5USB266	USB Charging Controller 2 port for DCP support	Mixed Signal	5V	2	0	0	NA	N/A	N/A
PI5USB66	USB Charging Controller 1 Port for DCP Support	Mixed Signal	5V	1	0	0	NA	N/A	None

USB Power Switches

Part No.	Function	Package
PI5PD2051B	70Ω, 1A Current-Limited, Power-Distribution Switch	5-SOT23 (TA5)
PI5PD2065	70Ω, 1.5A Current-Limited, Power-Distribution Switch	5-SOT23 (TA5), 8-SOIC (W8), EP-MSOP8 (UE8)
PI5PD2069	70Ω, 2.1A Current-Limited, Power-Distribution Switch	8-SOIC (W8), 8-MSOP (U8)

Signal Switches/Multiplexers - Video, DP, HDMI, VGA

Part No.	Description	Analog or Digital?	Voltage	Lanes	Single Ended Channels	Differential Channels	Signal Type	Configuration	Type
PI3HDMI1310-A	3:1 Non-EQ Blocking HDMI Switch	Analog	3.3	0	0	4	Differential	4-differential 3:1 + 3 Side Band	3 to 1
PI3VDP3212	2-Lane DisplayPort 1.2 Compliant Switch								
PI3VDP12412	4-Lane DisplayPort 1.2 Switch	Digital	3.3	4	0	4	Differential	1:2 Mux/Demux	SPDT
PI3VDP612-A	x4 Lane DisplayPort 1.1a Switch with Triple Control Logic	Digital	3.3	4	12	6	Differential and Single Ended	6-differential Channel 2:1	SPDT
PI3VEDP212	x2 Lane DisplayPort 1.1a Switch with Triple Control Logic	Digital	3.3	2	6	3	Differential and Single Ended	4-differential Channel 2:1	SPDT
PI3V724	VGA switch with monitor detection	Analog	3.3V/5V	0	3	0	Differential	SPDT or 1:2 DeMux or 2:1 Mux	SPDT
PI3VST01	VGA, HPD signal generator	Analog	3.3V/5V	0	1	0	Differential	SPST	SPST
PI3WVR12612	DisplayPort / HDMI video switch	Digital	3.3	4	0	4	Differential	2:1 or 1:2 DeMux/Mux	SPDT
PI3WVR12412	DisplayPort / HDMI video switch	Digital	3.3	4	0	4	Differential	2:1 or 1:2 DeMux/Mux	SPDT
PI3TB212	10.3Gbps Thunderbolt and DisplayPort Switch	Digital	3.3	5	0	5	Differential	TB-DP Mux/DeMux	SPDT

USB 2.0/3.0 Signal Switches

Part No.	Function	Package
PI2USB3212	USB3.0 2:1/1:2 mux/demux for superspeed signals, 1.5V supply	TQFN (ZH28)
PI3USB302	USB3.0 2:1/1:2 mux/demux for superspeed signals, 3.3V Supply	TQFN (ZB20)
PI3USB304	USB3.0 Dual 2:1 mux/demux	TQFN (ZH42)
PI3USB3102	USB3.0 2:1/1:2 mux demux for superspeed and high speed signals, 3.3V	TQFN (ZL32)
PI3USB102	Dual SPDT for USB 2.0 HS Compliance and Flow Through Pinout	TQFN (ZL10), UQFN (ZM10)
PI3USB221	Dual SPDT with Charge-pump for USB 2.0 HS Compliance and Flow Through Pinout	TDFN (ZE10), TLLGA (XA10)
PI3USB10LP-B	Dual SPDT for USB 2.0 HS Compliance	TQFN (ZL10 and ZM10)
PI3USB14-A	Dual SP4T for USB 2.0 HS Compliance	TSSOP (L16), QSOP (Q16), TQFN (ZH20)
PI3USB20	QUAD SPDT for 2x USB 2.0 HS Ports	TSSOP (L16)
PI3USB32	Dual SPST USB 2.0 Switch with back drive support	TLLGA (XA8)
PI3USB40	Octal SPDT for 4x USB 2.0 HS Ports	TSSOP (A48)
PI3USB102	Dual SPDT for USB 2.0 HS Compliance and Flow Through Pinout	SPDT
PI3USB103	Dual SPST USB 2.0 Switch with Back Drive Support and MHL Switching Support	SPDT
PI3USB221	High-Speed USB2.0 1:2 Multiplexer/DeMultiplexer Switch with Signal Enable	SPDT
PI3USB223	USB2.0 and Audio Switch	SPDT
PI3USB302	2:1 MUX/DeMux 3.3V USB3.0 Switch	SPDT
PI3USB3102	USB3.0 and USB2.0 Combo Switch	DPDT
PI3USBH22	Mobile HDMI Link (MHL) & USB 2.0 Switch	
PI3USB304	Dual USB 3.0 2:1 Mux/Demux with Enable	

Bus Switches

Part No.	Description	Package
PI3C3306	2.5V/3.3V, 2-bit, 2-port High-bandwidth Bus Switch	8-TSSOP (L8), 8-MSOP (U8)
PI3C3125	2.5V/3.3V 4-Bit Bus Switch with Individual Low Enables	16-QSOP (Q16)
PI3CH480	2.5V/3.3V Quad 2:1 Mux/Demux Bus Switch	16-QSOP (Q16), 16-TSSOP (L16)
PI3C3384	2.5V/3.3V 10-Bit Bus Switch	24-QSOP (Q24)
PI3B3257	3.3V Quad 2:1 Multiplexer/Demultiplexer Bus Switch	16-QSOP (Q16)
PI3CH281	2.5V/3.3V Dual 4:1, Multiplexer/Demultiplexer Bus Switch	16-QSOP (Q16), 16-TSSOP (L16)
PI3C32X245	2.5V/3.3V 16-Bit Bus Switch	40-BQSOP (B40)
PI3CH800	2.5V/3.3V, 8-Channel, 2-Port, High-speed NanoSwitch Bus Switch	20-TSSOP (L20), 20-QSOP (Q20)
PI3CH1000	2.5V/3.3V, 10-Channel, 2-Port High-speed NanoSwitch Bus Switch	24-TSSOP (L24)

Analog Switches

Part No.	Description	Analog or Digital?	Voltage	Lanes	Single Ended Channels	Differential Channels	Signal Type	Configuration	Type
PI3A114-A	1:4 Mux/DeMux with Low Threshold Control Inputs	Analog	3.3	0	1	0	Single Ended	1-channel SP4T	SP4T
PI3A125B	SOTiny Low-Voltage, 8-ohm Single Analog / Bus Switch	Analog	5	0	1	0	Single Ended	1-channel SPST	SPST
PI2PCIE212	2 Differential Channel 2:1, PCIe Mux, 1.8V	Analog	1.8	1	0	2	Differential	Mux: 2-differential Channel, 2:1	
PI3A223	Dual SPDT with 0.6-ohm Ron	Analog	3.3	0	2	0	Single Ended	2-channel SPDT	SPDT
PI3A2268	Dual SPDT with 0.45-ohm Ron	Analog	3.3	0	2	0	Single Ended	2-channel SPDT	SPDT
PI3A3159	3.0V, SOTiny, 0.4-ohm SPDT Analog Switch	Analog	3.3	0	1	0	Single Ended	1-channel SPDT	SPDT
PI3A3160	3.0V, SOTiny, 0.4-ohm Dual SPDT Analog Switch	Analog	3.3	0	2	0	Single Ended	1-channel SPDT	SPDT
PI3A3899	Dual-DPDT (0.5 Ω) Analog Switch with Negative Swing Audio	Analog	3.3	0	4	0	Single Ended	2-Channel DPDT	DPDT
PI3A412	Quad SPDT	Analog	3.3	0	4	0	Single Ended	4-channel SPDT	SPDT
PI3A4626	3.0V, SOTiny, 0.4-ohm, SPST Analog Switch	Analog	3.3	0	1	0	Single Ended	1-channel SPST	SPST

LVDS Switches

Part No.	Description	Analog or Digital?	Voltage	Lanes	Single Ended Channels	Differential Channels	Signal Type	Configuration	Type
PI2LVD412	4-Differential Channel 2:1 Mux/DeMux for LVDS Signals	Analog	1.8	0	8	4	Differential and Single Ended	Mux: 4 Differential Channel, 2:1	SPDT
PI2LVD512	5-Differential Channel 2:1 Mux/DeMux for LVDS Signals	Analog	1.8	0	10	5	Differential and Single Ended	Mux: 5 Differential Channel, 2:1	SPDT
PI3DBV40	3.3V, Wide Bandwidth, 4-channel, 2:1 Mux/DeMux Video Switch with Single Enable	Analog	3	0	8	4	Differential and Single Ended	Mux: 4-channel, 2:1	SPDT
PI3LVD1012	10-Differential Channel 2:1 Mux/DeMux for LVDS Signals	Analog	3.3	0	20	10	Differential and Single Ended	Mux: 10 Differential Channel, 2:1	SPDT
PI3LVD400	3.3V, 4-Differential Channel High-speed 1:2 Switch with Integrated DDC Switch/Level-shifter	Analog	3.3	0	10	5	Differential and Single Ended	Mux: 5 Differential Channel, 2:1	SPDT
PI3LVD512	5-Differential Channel 2:1 Mux/DeMux for LVDS Signals	Analog	3.3	0	10	5	Differential and Single Ended	Mux: 5 Differential Channel, 2:1	SPDT
PI3LVD812	8-Differential Channel 2:1 Mux/DeMux for LVDS Signals	Analog	3.3	0	16	8	Differential and Single Ended	Mux: 8 Differential Channel, 2:1	SPDT

LVDS Transceiver/Driver/Receiver (Low Voltage Differential Signaling)

Part No.	Description	Drive Capability	Signal Converter	Bits Needed	Max Frequency (Mbps)	Industrial Temp
PI90LV01	SOTiny Single LVDS Driver	4mA	LVTTTL to LVDS	1	660	-40°C~+85°C
PI90LV017A	Single LVDS Driver	4mA	LVDS tp LVTTTL	1	400	-40°C~+85°C
PI90LV02	SOTiny Single LVDS Receiver		LVDS to LVTTTL	1	400	-40°C~+85°C
PI90LV027A	Dual LVDS Driver	4mA	LVTTTL to LVDS	2	400	-40°C~+85°C
PI90LV028A	Dual LVDS Receiver		LVDS to LVTTTL	2	400	-40°C~+85°C
PI90LV031A	Quad LVDS Driver (EN)	4mA	LVTTTL to LVDS	4	400	-40°C~+85°C
PI90LV032A	Quad LVDS Receiver (EN)		LVDS to LVTTTS	4	400	-40°C~+85°C
PI90LV047A	Quad Flow through Driver	4mA	LVPECL or LVDS to LVDS	4	660	-40°C~+85°C
PI90LV048A	Quad Flow through Receiver		LVDS to LVTTTS	4	660	-40°C~+85°C
PI90LV179	Single Transceiver	4mA	LVTTTL and/or LVDS to LVTTTL and/or LVDS	1	660	-40°C~+85°C
PI90LV9637	Dual LVDS Receiver		LVDS to LVTTTS	2	660	-40°C~+85°C
PI90LVB010	SOTiny Single Bus LVDS Transceiver	8mA	LVTTTL and/or LVDS to LVTTTL and/or LVDS	1	100	-40°C~+85°C
PI90LVT386	16-Wide LVDS Receiver w/Integrated Termination		LVDS to LVTTTS	16	660	-40°C~+85°C

Voltage Level Translation

Part No.	Description	Translator	Package
PI3VT3245-A	8-bit, 2-port, Low Voltage Translator	3.3V to 2.5V	20-QSOP (Q20), 20-TSSOP (L20)
PI3VT32X245-A	16-bit, 2-port, Low Voltage Translator	2.5V to 1.8V	40-BQSOP (B40)
PI4ULS5V102	2-bit, Automatic Direction Sensing Voltage Translator	1.2V to 5.5V	8-MSOP (U8), 8-CSP (GA8)
PI4ULS5V104	4-bit, Automatic Direction Sensing Voltage Translator	1.2V to 5.5V	12-CSP (GA12), 14-QFN (ZB14)
PI4ULS3V08M/16	8-bit, 16-bit Automatic Direction Sensing Voltage Translator	1.2V to 3.6V	32-TQFN (ZL32), 36-TQFN (ZF36)
PI4ULS5V202	2-Bit Bi-directional Level Shifter with Automatic Sensing	1.2V to 5.5V	8-MSOP (U8), UDFN
PI6ULS5V201	1-Bit Bi-directional Level Shifter with Automatic Sensing	1.2V to 5.5V	6-SOT23 (TA6), UDFN
PI6ULS5V9306	Dual Bi-directional I ² C-bus and SMBus voltage-level translator	1.2V to 3.3V	8-MSOP (U8), 8-TDFN (ZE8)
PI6ULS5V9509	Level Translating I ² C-Bus/SMBus Repeater with Tiny Package	1.0V to 5.5V	8-MSOP (U8), 8-SOIC (W8), UQFN
PI6ULS5V9515A	I ² C Bus/SMBus Repeater	2.3V to 3.6V	8-MSOP (U8), 8-SOIC (W8), 8-TDFN (ZE8)
PI6ULS5V9517A	Level Translating I ² C Bus/SMBus Repeater	0.9V to 5.5V	8-MSOP (U8), 8-SOIC (W8), 8-TDFN (ZE8)
PI74AVC164245A/LA	16-bit Level Shifting Transceiver	3.3V to 1.8V/2.5V	48-SSOP (V48), 48-TSSOP (A48)
PI74HSTL1212	24-bit HSTL Bi-Directional Level Shifting Transceiver	3.3V to 1.8V	64-TSSOP (A64)

CVBS Video Decoder

Part No.	Product Description	Configuration	Package
PI7VD9004H	4-channel 960H Video Decoder	4-channel CVBS with BT656	LQFP(FD128)
PI7VD9008H	8-channel 960H Video Decoder	4-channel CVBS with BT656	LQFP(FD128)

Display Repeater and Level Shifters

Part No.	Product Description	Configuration	Package
PI3VDP1430	3.0G Dual Mode DisplayPort Level Shifter and Re-driver	4 differential channel 1:1	TQFN(ZBE48)
PI3HDMI511	3.4G HDMI Re-driver & DisplayPort Level Shifter for Source-side application	4 differential channel 1:1	TQFN(ZL32)
PI3HDMI611	3.4G HDMI Re-driver & DisplayPort Level Shifter for Sink-side application	4 differential channel 1:1	TQFN(ZL32)
PI3EQXDP1201	5.4G DP1.2 Re-driver for Source-side application	4 differential channel 1:1	TQFN(ZB48)

Active HDMI Switches and Splitters

Part No.	Product Description	Configuration	Package
PI3HDMI412AD	1:2 3.0Gbps Active HDMI1.4 compliant Splitter/Re-driver with 10kV ESD	4-differential channel 1:2	TQFN(ZB56)
PI3HDMI521	2:1 3.4Gbps HDMI1.4 Switch/Re-driver with built-in ARC and Fast Switching support for Source Application	4-differential channel 2:1	LQFP(FB48)
PI3HDMI621	2:1 3.4Gbps HDMI1.4 Switch/Re-driver with built-in ARC and Fast Switching support for Sink Application	4-differential channel 2:1	LQFP(FB48)
PI3HDMI336	3:1 Active 3.4Gbps HDMI Switch/Re-driver with I ² C control and ARC Transmitter	4-differential channel 3:1	LQFP(FB64)
PI3HDMI245-A	4:1 Active 3.0Gbps HDMI Switch/Re-driver with I ² C control	4-differential channel 4:1	TQFN(ZLE72)

MicroProcessor Supervisory

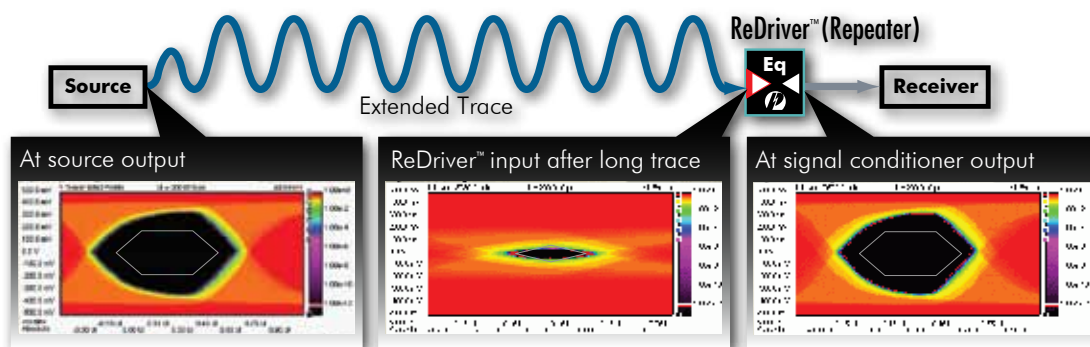
Part No.	Description	Monitor Types	Reset Threshold	Reset Output	Reset Time	Manual Reset?	Watch Dog Input?
PT7A751x	Active Low Reset output in μ P systems with WD and MR function	Single-Voltage Monitors	2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active Low	200ms	Yes	Yes
PT7A752x	Active High Reset output in μ P systems with WD and MR function	Single-Voltage Monitors	2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active High	200ms	Yes	Yes
PT7A753x	Power-supply circuitry in μ P systems with MR function	Single-Voltage Monitors	2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active Low & High	200ms	Yes	No
PT7M1233-xx#	Bi-direct Active low supervisory circuit	Single-Voltage Monitors	3.3 to 5.5	Bi-Direct, Active Low	200ms	No	No
PT7M1233A-xx#	Bi-direct Active low supervisory circuit	Single-Voltage Monitors	2.5 to 3.3	Bi-Direct, Active Low	200ms	No	No
PT7M1813-xx#	Bi-direct Active low supervisory circuit	Single-Voltage Monitors	3.3 to 5.5	Bi-Direct, Active Low	200ms	No	No
PT7M1818-xx#	Bi-direct Active low supervisory circuit	Single-Voltage Monitors	2.5 to 3.3	Bi-Direct, Active Low	200ms	No	No
PT7M610xCH#	Ultra Low Voltage Detectors	Single-Voltage Monitors	0 to 1.2	Push-Pull, Active High	40us	No	No
PT7M610xCL#	Ultra Low Voltage Detectors	Single-Voltage Monitors	0 to 1.2	Push-Pull, Active Low	40us	No	No
PT7M610xNL#	Ultra Low Voltage Detectors	Single-Voltage Monitors	0 to 1.2	Open-Drain, Active Low	40us	No	No
PT7M61xxCH#	Low power consumption and no delay time supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active High	40us	No	No
PT7M61xxCL#	Low power consumption and no delay time supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active Low	40us	No	No
PT7M61xxNL#	Low power consumption and no delay time supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Active Low	40us	No	No
PT7M62xxCH#	Ultra-low-power voltage detectors for monitor battery, power-supply and system voltages	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active High	20us	No	No
PT7M62xxCL#	Ultra-low-power voltage detectors for monitor battery, power-supply and system voltages	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active Low	20us	No	No
PT7M62xxNL#	Ultra-low-power voltage detectors for monitor battery, power-supply and system voltages	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Active Low	20us	No	No
PT7M6314USxxDx	High Accuracy and Bidirectional output and debounced Reset supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Bi-Direct, Active Low	1.4ms, 26ms, 200ms, 1570ms	Yes	No
PT7M6315USxxDx	High Accuracy and Open-drain and debounced Reset supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Active Low	1.4ms, 26ms, 200ms, 1570ms	Yes	No
PT7M64xxBL#	Low power consumption with 200ms delay time supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Bi-Direct, Active Low	200ms	No	No
PT7M64xxCH#	Low power consumption with 200ms delay time supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active High	200ms	No	No
PT7M64xxCL#	Low power consumption with 200ms delay time supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Push-Pull, Active Low	200ms	No	No
PT7M64xxNL#	Low power consumption with 200ms delay time supervisory Circuit	Single-Voltage Monitors	1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Active Low	200ms	No	No
PT7M6709A	Quad voltage monitors for Multi-voltage systems	Multi-Voltage Monitors	0 to 1.2, 1.2 to 1.8, 1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Internal Push-Pull	30us	No	No
PT7M6709B	Quad voltage monitors for Multi-voltage systems	Multi-Voltage Monitors	0 to 1.2, 1.2 to 1.8, 1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Internal Push-Pull	30us	No	No
PT7M6709C	Quad voltage monitors for Multi-voltage systems	Multi-Voltage Monitors	0 to 1.2, 1.2 to 1.8, 1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Internal Push-Pull	30us	No	No
PT7M6709D	Quad voltage monitors for Multi-voltage systems	Multi-Voltage Monitors	0 to 1.2, 1.2 to 1.8, 1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Internal Push-Pull	30us	No	No
PT7M6709E	Quad voltage monitors for Multi-voltage systems	Multi-Voltage Monitors	0 to 1.2, 1.2 to 1.8, 1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Internal Push-Pull	30us	No	No
PT7M6709F	Quad voltage monitors for Multi-voltage systems	Multi-Voltage Monitors	0 to 1.2, 1.2 to 1.8, 1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Internal Push-Pull	30us	No	No
PT7M6709G	Quad voltage monitors for Multi-voltage systems	Multi-Voltage Monitors	0 to 1.2, 1.2 to 1.8, 1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Internal Push-Pull	30us	No	No
PT7M6709H	Quad voltage monitors for Multi-voltage systems	Multi-Voltage Monitors	0 to 1.2, 1.2 to 1.8, 1.8 to 2.5, 2.5 to 3.3, 3.3 to 5.5	Open-Drain, Internal Push-Pull	30us	No	No

Signal Integrity Solutions from Pericom

Poor signal quality can significantly impact system performance and reliability. Maintaining eye-pattern signal integrity at the receiver end-points in high-speed, serial-differential protocols, like PCI Express, SATA2 or USB 3.0, is a big challenge for system designers. At high transmission rates, signal integrity issues become increasingly restrictive on the length of PCB trace (or cable length), reducing flexibility and feature implementation. Pericom's ReDriver™ signal conditioning products* correct for signal level attenuation and noise (jitter) using equalization, pre-emphasis/de-emphasis techniques for low bit error rates with high-speed signal protocols including PCI Express®, USB, SATA/SAS standards. Pericom also offers many digital video switches that have proprietary technology for superior signal integrity.

ReDriver™ Product Features:

- ➔ Data rates of 2.5Gbps (PCIe), 3.0Gbps (SATA 3Gbps, SAS), 5.0Gbps (USB 3.0, PCIe 2.0), 6Gb (SAS 2), 8.0Gbps (PCIe 3.0), 10Gb (Ethernet)
- ➔ Pin configured or I2C receiver equalization for each lane
- ➔ Pin configured or I2C transmitter de-emphasis & amplitude for each lane
- ➔ Input signal level detect & output squelch on all channels
- ➔ Electrical idle and OOB support
- ➔ Lowest power consumption optimized by protocol
- ➔ Standby mode – power down management
- ➔ Wide variety of package/feature options



PERICOM'S REDRIVER (REPEATER) ENHANCES SIGNAL INTEGRITY QUALITY

SAS/SATA/XAUI ReDriver™ (Repeater)

Part No.	Protocol	Function	Package
PI2EQX3201A	SAS/SATAx/XAUI	3.2Gbps 1-port SAS/SATAx and XAUI ReDriver	36-TQFN (ZF36)
PI2EQX3202A	SAS/SATAx/XAUI	3.2Gbps 2-port SAS/SATAx and XAUI ReDriver	84-LFBGA (NB84)
PI2EQX3232A	SAS/SATAx/XAUI	3.2Gbps 2-port SAS/SATAx and XAUI ReDriver w/ flow-through pinout	48-TQFN (ZD48)
PI2EQX3421	SAS/SATA/XAUI	3.2Gbps 1-port SAS/SATA/XAUI ReDriver/Port 2:1Switch	28-TQFN (ZH28)
PI2EQX6811	SAS/SATA/XAUI	6.5Gbps 1-port SAS/SATA/XAUI ReDriver	20-ZD (TQFN20)
PI3EQX6801/6852B	SAS/SATA/XAUI	6.5Gbps 1-port SAS/SATA/XAUI ReDriver	20-ZD (TQFN20)
PI3EQX6814/6874	SAS/SATA/XAUI	6.5Gbps 4-port SAS/SATA/XAUI ReDriver	100-LFBGA (NJ100)

PCI Express ReDriver™ (Repeater)

Part No.	Function	Protocol	Data Rate Gbps	Lanes	Input Equalization Options, dB	Output Level Options	Output Swing, mV Max	Output Emphasis, dB	Package
PI2EQX4401D	Equalization and De-emphasis ReDriver	PCIe	2.5	1	0, 2.5, 4.5, 6.5	1.0x, 1.2x	1300	0, -3.5	36-TQFN (ZF36)
PI2EQX4402D	Equalization and De-emphasis	PCIe	2.5	2	0, 1.5, 2.5, 3.5, 4.5, 5.5, 6.5, 7.5	0.8x, 1.0x, 1.2x, 1.4x	1600	0, -2.5, -3.5, -4.5	84-LFBGA (NB84)
PI2EQX4432D	Equalizer with Flow-through pinout	PCIe	2.5	2	2.5, 6.5	1.0x, 1.2x	1300	0, -3.5	48-TQFN (ZD48)
PI3EQX5801	Equalization and Emphasis/w I ² C Control	PCIe 2.0	5.0	1	0~15.0	3.0x	1700	0, -3.5, -6.0	20-TQFN (ZD20)
PI2EQX5864D	Equalization and Emphasis/w I ² C Control	PCIe 2.0	5.0	4	1.2, 1.5, 2.6, 4.3, 5.8, 7.1, 9.0, 12.3	0.5, 0.7, 0.9, 1.0	1000	0, -2.5, -3.5, -4.5, -5.5, -6.5, -7.5, 8.5	56-TQFN (ZF56)
PI2EQX5904	Equalization and Emphasis/w I ² C Control	PCIe 2.0	5.0	4	1.2, 1.5, 2.6, 4.3, 5.8, 7.1, 9.0, 12.3	0.5, 0.7, 0.9, 1.0	1100	0, -2.5, -3.5, -4.5, -5.5, -6.5, -7.5, 8.5	100-LBGA (NJ100)
PI2EQX5984	Equalization and Emphasis/w I ² C Control	PCIe 2.0	5.0	4	1.2, 1.5, 2.6, 4.3, 5.8, 7.1, 9.0, 12.3	0.5, 0.7, 0.9, 1.0	1100	0, -2.5, -3.5, -4.5, -5.5, -6.5, -7.5, 8.5	72-TQFN (ZL72)
PI2EQX8804A	Equalization and Emphasis/w I ² C Control	PCIe 3.0	8.0	4	Contact Pericom for more info				100-LBGA (NJ100)
PI2EQX8818A	Equalization and Emphasis/w I ² C Control and Flow-through pinout	PCIe 3.0	8.0	4	Contact Pericom for more info				100-LBGA (NJ100)
PI2EQX8864A	Equalization and Emphasis/w I ² C Control	PCIe 3.0	8.0	4	Contact Pericom for more info				72-TQFN (ZL72)

USB 3.0 ReDriver™ (Repeater)

Part No.	Function	Package	Applications
PI3EQX501	5.0Gbps Single-Channel USB 3.0 ReDriver with Equalization and Emphasis	TQFN (ZA8)	Tablet, Smartphone, Ultrabook
PI3EQX502	5.0Gbps 1-port USB 3.0 ReDriver with Equalization and Emphasis	TQFN (ZH16)	Tablet, Notebook, Ultrabook
PI3EQX7741	5.0Gbps 1-port USB 3.0 ReDriver with Equalization and Emphasis	TQFN (ZD20)	Notebook, Cabling, Automotive
PI3EQX7742	5.0Gbps 2-port USB 3.0 ReDriver with Equalization and Emphasis	TQFN (ZD42)	Server, Workstation, Notebook
PI3EQX7502	5.0Gbps 1-port USB 3.0 ReDriver with Equalization and Emphasis	TQFN (ZD24)	Notebook, Ultrabook, Server
PI3EQX7841	5.0Gbps 1-port USB 3.0 ReDriver with Equalization and Emphasis and I ² C Control	TQFN (ZD20)	Server, Workstation, Notebook

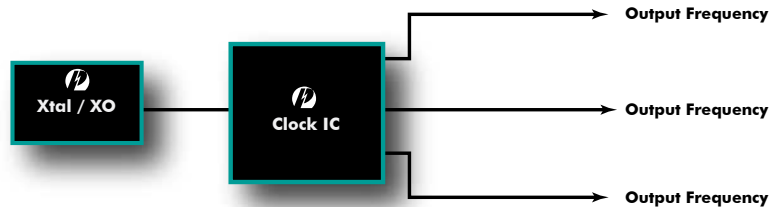
10Gb ReDriver™ (Repeater)

Part No.	Description	Gbps	Input Equalization, dB	Package
PI2EQX8814A	4-lane 10Gb ReDriver w/ Equalization & Emphasis	10.0	Contact Pericom for more information	100-LBGA (NJ100)
PI2EQX8814A-F	4-lane 10Gb ReDriver w/ Equalization & Emphasis	10.0	Contact Pericom for more information	100-LBGA (NJ100)



Timing Solutions from Pericom

Pericom offers total timing solutions — Quartz Timing + Silicon ICs solutions — for multiple high performance applications.

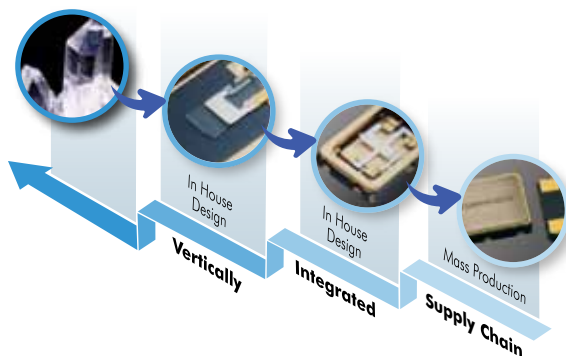


Clock IC Products

- Clock Buffers
- Zero-delay & Programmable Skew
- Clock Synthesizers
- Spread Spectrum Clock Generator
- VCXO

Pericom Frequency Control Products

- Crystals
- Crystal Oscillators
- ASSP XO Crystal Oscillators
- VCXO



Benefits

- True Alternate Source (own Oscillator IC)
- Best Lead Time and Supply
- Consistent Quality Control
- Best Cost Structure

Application Specific Crystal Oscillators - ASSP XO

Pericom's ASSP XO products provide excellent physical performance combining low jitter and low power, with proven technology that is specific to your application.

APPLICATIONS/CONNECTIVITY	OUTPUT FREQUENCY (MHZ)	PACKAGE (MM X MM)	OUTPUT LEVEL	SUPPLY VOLTAGE (V)	ASSP XO PART #
40GE	156.25	7 x 5	LVPECL	3.3	UX7040GE01
		5 x 3.2	LVPECL		UX5040GE01
10GE/ 10GE PON	156.25	7 x 5	LVC MOS	3.3	SX10GE156
			LVPECL		SN10GE156
		5 x 3.2	LVPECL		PD10GE156
			LVDS		LD10GE156
10GE-FC	159.375	7 x 5	LVPECL	3.3	SN10GE159
		5 x 3.2			PD10GE159
GPON	155.52	7 x 5	LVC MOS	3.3	SXGPON155
			LVPECL		SNGPON155
		5 x 3.2	LVPECL		PDGPON155
			LVDS		LDGPON155
PCIe 3.0	100	7 x 5	HCSL	3.3	SHPCIe100
		5 x 3.2			SQPCIE100
SAS2/SATA3	75	7 x 5	LVC MOS	3.3	FNSAS2075
	150	7 x 5 5 x 3.2	LVPECL		SNSAS2150 PDSAS2150

HiFlex™ Crystal Oscillators

Package Size (mm)	Pads	Output Logic	Supply Voltage (V)	Frequency Range (MHz)	Jitter	Product Series
3.2 x 2.5 x 1.0	4	LVC MOS	2.5, 3.3	10~212	< 1ps RMS	JX321
	6	LVPECL	2.5, 3.3	10~400	< 1ps RMS	JX322
5.0 x 3.2 x 1.2	6	LVC MOS	2.5, 3.3	10~212	< 1ps RMS	JX501
		LVPECL	2.5, 3.3	10~400	< 1ps RMS	JX502
7.0 x 5.0 x 2.0	6	LVC MOS	2.5, 3.3	10~212	< 1ps RMS	JX701
		LVPECL	2.5, 3.3	10~400	< 1ps RMS	JX702

LVC MOS Crystal Oscillators

Pericom's LVC MOS XO provides the best-in-class jitter performance and wide frequency range. Along with our complete voltage selection from 1.0V to 3.3V, Pericom can fulfill all your LVC MOS XO requirements.

Package Size (mm)	Pads	Supply Voltage (V)	Frequency Range (MHz)	Jitter	Product Series
2.0 x 1.6 x 0.6	4	1.2, 1.8, 2.5, 3.3	1~52	<1 ps RMS	VM 1.2V/VM 1.8V/VM 2.5V/VM 3.3V
2.0 x 1.6 x 0.75	4	1.2, 1.8, 2.5, 3.3	1~52	<1 ps RMS	FM 1.2V/FM 1.8V/FM 2.5V/FM 3.3V
2.5 x 2.0 x 0.9	4	1.2	1~60	<1 ps RMS	FJ 1.2V
		1.8, 2.5, 3.3	1~75	<1 ps RMS	FJ 1.8V/FJ 2.5V/FJ 3.3V
3.2 x 2.5 x 1.0	4	1.2	1~60	<1 ps RMS	FK 1.2V
		1.8, 2.5, 3.3	1~133	<1 ps RMS	FK 1.8V/FK 2.5V/FK 3.3V

Clipped Sinewave Crystal Oscillators

Lower your designs power consumption and EMI with Pericom's Clipped Sinewave XO. Using this unique XO, your design can benefit from power consumption lowered by 50% and EMI reduction of 30% without sacrificing performance.

Package Size (mm)	Pads	Supply Voltage (V)	Frequency Range (MHz)	Jitter	Product Series
2.0 x 1.6 x 0.6	4	1.8	10~60	<2 ps RMS	UM 1.8V
2.5 x 2.0 x 0.9	4	1.8	10~60	<2 ps RMS	UJ 1.8V
3.2 x 2.5 x 1.0	4	1.8	10~60	<2 ps RMS	UK 1.8V

Differential Output Crystal Oscillators

Package Size (mm)	Pads	Output Logic	Supply Voltage (V)	Frequency Range (MHz)	Jitter	Product Series
3.2 x 2.5 x 1.2	6	LVDS	2.5, 3.3	25~162	<1 ps RMS	LK 2.5V/LK 3.3V
		LVPECL	2.5, 3.3	25~162	<1 ps RMS	PK 2.5V/PK 3.3V
5.0 x 3.2 x 1.2	6	LVDS	2.5, 3.3	25~162	<1 ps RMS	LD 2.5V/LD 3.3V
		LVPECL	2.5, 3.3	25~162	<1 ps RMS	PD 2.5V/PD 3.3V
		LVPECL	2.5, 3.3	50~220	<1 ps RMS	SD 2.5V/SD 3.3V
		HCSL	2.5, 3.3	100	<1 ps RMS	SQ 2.5V/SQ 3.3V
		LVDS	2.5, 3.3	50~212.5	<1 ps RMS	WX503
		LVPECL	2.5, 3.3	50~212.5	<1 ps RMS	WX502
7.0 x 5.0 x 2.0	6	LVDS	3.3	1~800	<3 ps RMS	LN 3.3V
		LVPECL	2.5, 3.3	25~162	<1 ps RMS	PB 2.5V/PB 3.3V
		LVPECL	3.3	1~800	<3 ps RMS	PN 3.3V/PN 3.3V
		LVPECL	2.5, 3.3	50~220	<1 ps RMS	SN 3.3V/SN 2.5V
		LVDS	2.5, 3.3	25~162	<1 ps RMS	PX 2.5V/PX 3.3V
		HCSL	2.5, 3.3	100	<1 ps RMS	SH 2.5V/3.3V
		LVDS	2.5, 3.3	50~212.5	<1 ps RMS	WX703
		LVPECL	2.5, 3.3	50~212.5	<1 ps RMS	WX702

Temperature Compensated Crystal Oscillators (TCXO)

TCXOs are used to ensure that frequency variance is minimal across different temperatures.

Package Size (mm)	Pads	Output Logic	Supply Voltage (V)	Frequency Range (MHz)	Frequency Stability (ppm)	Product Series
2.5 x 2.0 x 0.8	4	Clip Sine	1.8 ~ 3.3	10 ~ 40	0.5 ~ 5	WT255
3.2 x 2.5 x 1.2	4	Clip Sine	1.8 ~ 3.3	10 ~ 40	0.5 ~ 5	WT325

Voltage Controlled TCXO (VCTCXO)

Package Size (mm)	Pads	Output Logic	Supply Voltage (V)	Frequency Range (MHz)	Frequency Stability (ppm)	Product Series
2.5 x 2.0 x 0.8	4	Clip Sine	1.8 ~ 3.3	10 ~ 40	0.5 ~ 2	WC255
3.2 x 2.5 x 1.2	4	Clip Sine	1.8 ~ 3.3	10 ~ 40	0.5 ~ 2	WC325

MHz Quartz Crystals

Pericom's quartz MHz crystals are produced in our own wholly owned factories allowing us to provide quick samples and customization for your needs.

Package Size (mm)	Pads	Frequency Range (MHz)	Package Description	Product Series
1.6 x 1.2 x 0.3	4	19.2~66	Au-Sn Sealed SMD Ceramic	US
2.0 x 1.6 x 0.3	4	12~66	Au-Sn Sealed SMD Ceramic	UW
2.0 x 1.6 x 0.45	4	24~54	Seam Sealed SMD Ceramic	FW
2.5 x 2.0 x 0.6	4	16~66	Seam Sealed SMD Ceramic	FH
3.2 x 2.5 x 0.65	4	12~66	Seam Sealed SMD Ceramic	FL
3.2 x 2.5 x 0.75	4	12~66	Glass Sealed SMD Ceramic	FQ

For complete package size options, including 5 x 3.2mm and 7 x 5mm, please visit www.pericom.com/fcp

kHz Tuning Fork Crystals

Pericom's kHz tuning fork crystals are used in a variety of applications including communication and measuring equipment, commercial and industrial applications, automotive electronics.

Package Size (mm)	Pads	Frequency (kHz)	Package Description	Product Series
8.0 x 3.0 x 18.8	2	32.768	Tubular Tuning Fork, Through-Hole	G1
6.0 x 2.0 x 18.8	2	32.768	Tubular Tuning Fork, Through-Hole	G2
6.0 x 2.0 x 9.0	2	32.768	Tubular Tuning Fork, SMD	G3
8.0 x 3.8 x 2.5	4	32.768	Plastic Molded Tuning Fork, SMD	G4
7.0 x 1.5 x 1.4	4	32.768	Plastic Molded Tuning Fork, SMD	G5
3.2 x 1.5 x 0.8	2	32.768	Ceramic Tuning Fork, SMD	G8
2.0 x 1.2 x 0.6	2	32.768	Ceramic Tuning Fork, SMD	G9

Tight Frequency Stability 32.768 kHz (32k) LVC MOS Crystal Oscillators

Package Size (mm)	Pads	Supply Voltage (V)	Frequency Stability (ppm)	Current Consumption (μA)	Product Series
2.5 x 2.0 x 0.9	4	1.8, 2.5, 3.3	20 ~ 50	10	KX251
3.2 x 2.5 x 1.0	4	1.8, 2.5, 3.3	20 ~ 50	10	KX321
5.0 x 3.2 x 1.2	4	1.8, 2.5, 3.3	20 ~ 50	10	KX501

Voltage Controlled Crystal Oscillators (VCXO)

Package Size (mm)	Pads	Output Logic	Supply Voltage (V)	Frequency Range (MHz)	Jitter	Product Series
2.5 x 2.0 x 0.9	4	LVC MOS	3.3	1~66	<1 ps RMS	YJ 3.3V
3.2 x 2.5 x 1.0	4	LVC MOS	3.3	1~66	<1 ps RMS	YK 3.3V
5.0 x 3.2 x 1.3	4	LVC MOS	3.3	1~66	<1 ps RMS	YD 3.3V
7.0 x 5.0 x 2.0	6	LVPECL	3.3	19.44~800	<3 ps RMS	PR 3.3V
		LVDS	3.3	19.44~800	<3 ps RMS	LR 3.3V
		LVC MOS	3.3	66~166	<3 ps RMS	YN 3.3V
		LVC MOS	3.3	1~77.76	<1 ps RMS	FR 3.3V

HiFlex™ Clock Generators

No. of Outputs	Output Freq. (MHz)	Output Voltage (V)	Jitter (typ) (ps)	Package	Part Number
9	A: 5 LVPECL/LVDS 312.5/156.25/125 B: 3 LVPECL/LVDS 312.5/156.25/125 C: 1 LVPECL/LVDS 312.5/156.25/125	3.3	0.5ps	48-TQFN	PI6LC4820
5	1 LVPECL Ref Clock (25MHz) A: 3 HCSL 100MHz, 1 LVC MOS 100MHz B: 1 LVC MOS 100/50	3.3	0.4 ps	32-TQFN	PI6LC4830
10	1 LVC MOS Ref Clock (25MHz) A: 3 LVC MOS 25/50 B: 3 LVC MOS 125MHz C: 3 LVDS 125MHz	3.3	0.35ps	32-TQFN	PI6LC4840
17	12 complimentary LVC MOS Ref clock (25MHz) A: 2 HCSL 100MHz B: 2 Complimentary LVC MOS 24MHz C: 1 HCSL 100/200 with Spread	3.3	2.3ps (PCIe 2.0)	56-TQFN	PI6LC4831A
14	4x HCSL 100/125/200/250 MHz w/ OE and SS 2x LVC MOS 33/66/50/100MHz, SS capable 5x LVC MOS 25/125 MHz 1x LVPECL 312.5/156.25/125 MHz 1x LVC MOS 156.25/125 MHz 1x LVPECL 25/125 MHz	2.5, 3.3	0.5 ps	56-TQFN	PI6LC4833
7	1x LVC MOS 25MHz 2x LVPECL/LVDS 100/125 MHz 1x LVPECL/LVDS 156.25 MHz 2x LVPECL/LVDS 106.25 MHz 1x LVC MOS 33 MHz	3.3	0.5 ps	40-TQFN	PI6LC4872

PCIe Timing Solution & Thunderbolt Clock Generators

Extensive portfolio covering PCIe Gen 1, 2 and 3

No. of Outputs	Output Freq. (MHz)	PCIe Gen	Output Voltage (V)	Thunderbolt Capable	Package	Part Number
1	100MHz HCSL	3	3.3	Yes	16-TQFN	PI6C557-01B
2	1x 100MHz HCSL 1x 33MHz LVC MOS	1	3.3	No	16-TSSOP	PI6C557-10
2	2x 100MHz HCSL	2/ 3	3.3	Yes	16-TSSOP	PI6C557-03A/ B
4	4x 100MHz HCSL	2/ 3	3.3	Yes	20-TSSOP	PI6C557-05/ B
16	12x 100MHz, 2x 50MHz, 1x 33/66/133MHz, 1x 32.256MHz	1/ 2	3.3	Yes	56-TSSOP	PI6C49004/ A
12	6x 100MHz, (1+1)x 33/50/66/100/133MHz, 1x 125MHz, 3x 25MHz	2	3.3	Yes	48-TSSOP	PI6C49005
12	4x 100MHz, (2+2)x 33/50/66/100/133MHz, 1x 125MHz, 3x 25MHz	2	3.3	Yes	48-TSSOP	PI6C49006
7	5x 100MHz, 2x 25MHz	2	3.3	Yes	28-TSSOP	PI6C49015

Embedded Clock Generators

Extensive portfolio of clock generators for use in embedded, wireless networking applications

No. of Outputs	Output Freq. (MHz)	Output Type	Output Voltage (V)	Jitter (typ) (ps)	Package	Part Number
9	5x 100MHz, 2x 50MHz, 1x 33/66/133MHz, 1x 32.256MHz	HCSL, LVCMOS	3.3	3.1	48-TSSOP	PI6C49003
16	12x 100MHz, 2x 50MHz, 1x 33/66/133MHz, 1x 32.256MHz	HCSL, LVCMOS	3.3	3.1	56-TSSOP	PI6C49004/ A
12	6x 100MHz, (1+1)x 33/50/66/100/133MHz, 1x 125MHz, 3x 25MHz	HCSL, LVCMOS	3.3	3.1	48-TSSOP	PI6C49005
12	4x 100MHz, (2+2)x 33/50/66/100/133MHz, 1x 125MHz, 3x 25MHz	HCSL, LVCMOS	3.3	3.1	48-TSSOP	PI6C49006
4	1x 200MHz, 2x 25MHz, 1x 32.256MHz	HCSL, LVCMOS	3.3	3.1	28-TSSOP	PI6C49014
7	5x 100MHz, 2x 25MHz	HCSL, LVCMOS	3.3	3.1	28-TSSOP	PI6C49015
6	3x 100MHz, 1x 125MHz, 1x 80MHz, 66.66MHz	HCSL, LVCMOS	3.3	3.1	40-TQFN	PI6C49016
9	4x 100MHz, 1x 125MHz, 1x 33/67.33MHz, 1x 25MHz, 1x 48MHz, 1x 19.2MHz	HCSL, LVCMOS	3.3	3.1	48-TSSOP	PI6C49019
4	3x 25 MHz, 1x 8.192MHz	LVC MOS	1.8 ~ 3.3	1.5	16-TSSOP	PI6C490086
4	3x 25 MHz, 1x 32.768kHz	LVC MOS	1.8 ~ 3.3	1.5	16-TSSOP	PI6C490097

Differential Fanout Buffers

Provides ultra low additive jitter <0.03ps RMS

Provides maximum flexibility for designs

No. of Outputs	Output Freq.(MHz)	Output type	Output Voltage (V)	Additive Jitter (typ) (ps)	Package	Part Number
10	1500	LVPECL, LVDS, HCSL	2.5 / 3.3	0.03	48-TQFN	PI6C49S1510
10	1500	LVPECL	2.5 / 3.3	0.03	32-TQFN/TQFP	PI6C49I1510
10	500	LVPECL	2.5 / 3.3	0.05	32-TQFP	PI6C48S3111
6	1500	LVPECL, LVDS, HCSL	2.5 / 3.3	0.03	48-TQFN	PI6C49S1506
6	1500	LVDS	2.5 / 3.3	0.03	24-TSSOP	PI6C4921506
6	1500	LVPECL	2.5 / 3.3	0.03	24-TSSOP	PI6C49I1506-06
5	1500	LVPECL	2.5 / 3.3	0.03	20-TSSOP	PI6C49I1505
5	1500	LVPECL	2.5 / 3.3	0.03	20-TSSOP	PI6C49I1505-04
5	1500	LVPECL	2.5 / 3.3	0.03	20-TSSOP	PI6C49I1505-07
4	250	HCSL	2.5 / 3.3	0.1	20-TSSOP	PI6C4931504-04
4	1500	LVPECL, LVDS, HCSL	2.5 / 3.3	0.03	20-TSSOP	PI6C49S1504
4	1500	LVPECL	2.5 / 3.3	0.03	20-TSSOP	PI6C49I1504-03
4	500	LVPECL	3.3	0.05	20-TSSOP	PI6C48S35-11B
4	500	LVPECL	3.3	0.04	20-TSSOP	PI6C48S35-01B
4	800	LVPECL	3.3	0.05	20-TSSOP	PI6C48S33-01
4	650	LVDS	3.3	0.05	20-TSSOP	PI6C48S45
4	800	LVDS	3.3	0.05	20-TSSOP	PI6C48S43
2	800	LVPECL	3.3	0.05	8-SOIC	PI6C48S311

Speciality Clocks

Speciality functions for unique applications

Function	No. of Outputs	Output Freq. (MHz)	Output type	Output Voltage (V)	Package	Part Number
Jitter Cleaner	1	25	LVC MOS	3.3	20-TSSOP	PI6CX201A
Clipped Sinewave Buffer	2	19.2 ~ 52	Clipped Sinewave	1.5	10-UQFN	PI6UMC10802

Real Time Clocks

Time Display (Hour)	Programmable Square Wave Output (Hz)	Alarm Interrupt	Clock Calibration	Interface	Package	PartNumber
12/24	/	/	/	3-Wire	8-DIP, SOIC, DFN	PT7C4302
12/24	1, 4.096k, 8.192k, 32.768k	/	/	I2C	8-DIP, SOIC, DFN	PT7C4307
12/24	1, 4.096k, 8.192k, 32.768k	✓	/	I2C	8-DIP, SOIC, MSOP, DFN	PT7C4337
12/24	1, 4.096k, 8.192k, 32.768k	/	/	I2C	8-SOIC, MSOP, DFN	PT7C433833
24	1~8192, 32.768k	✓	✓	I2C	8-SOIC, DFN	PT7C4311
24	1, 32, 1.024k, 32.768k	✓	/	I2C	8-DIP, SOIC	PT7C4363
12/24	1, 2, 32.768k, 32k	✓	✓	I2C	8-SOIC, DFN, TSSOP	PT7C4372A
12/24	1, 2, 4, 8, 16, 32K	✓	✓	3-Wire	8-SOIC, TSSOP	PT7C43190
12/24	1, 2, 4, 8, 16, 32K	✓	✓	I2C	8-SOIC, TSSOP	PT7C43390
24	1, 32, 1.024K, 32.768K	✓	✓	I2C	8-DIP, SOIC, DFN TSSOP, MSOP	PT7C4563

Single Ended Fanout Buffers (LVCMOS)

Provides high performance, fast rise/ fall times

Provides BOM cost and board space reduction

No. of Outputs	Output Freq. (MHz)	Input Type	Output Voltage (V)	Package	Part Number
10	200	Crystal, LVTTTL, LVCMOS, Differential	1.5 / 1.8 / 2.5 / 3.3	32-QFN	PI6C49X0210
10	200	Crystal, LVTTTL, LVCMOS, Differential	1.2/ 1.5 / 1.8 / 2.5 / 3.3	32-QFN	PI6C49X0208
7	150	LVCMOS	2.5	16-QSOP, TSSOP	PI49FCT20803
7	133	LVCMOS	3.3	16-QSOP, TSSOP	PI49FCT32803
7	156	LVCMOS	3.3	16-QSOP, TSSOP	PI49FCT3803
6	100	Crystal, LVCMOS	1.8 / 2.5 / 3.3	16-TSSOP	PI6C10806B
5	150	LVCMOS	2.5	16-QSOP, TSSOP	PI49FCT20802
5	133	LVCMOS	3.3	16-QSOP, TSSOP	PI49FCT32802
5	156	LVCMOS	3.3	16-QSOP, TSSOP	PI49FCT3802
4	250	LVTTTL, LVCMOS	1.8, / 2.5	8-SOIC	PI6C10804
4	160	LVTTTL, LVCMOS	3.3 / 5	8-SOIC	PI6C18551
4	200	LVCMOS	1.2, / 1.5	8-SOIC	PI6CL10804
4	160	LVTTTL, LVCMOS	3.3	8-SOIC, TSSOP	PI6CV2304
4	160	LVTTTL, LVCMOS	3.3	8-SOIC, TSSOP	PI6CV304

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Zero Delay Buffers

Provides low jitter, low skew and high frequency outputs

No. of Outputs	Output Freq. (MHz)	Input / Output Type	Output Voltage (V)	Jitter (typ) (ps)	Package	PartNumber
9	220	LVTTL	3.3, 2.5	100	16-SOIC, TSSOP	PI6C22409-1H
9	200	LVTTL	3.3, 2.5	100	16-SOIC, TSSOP	PI6C22409
8	95-105	HCSL	3.3	60	48-TSSOP	PI6C20800B
8	95-105	HCSL	3.3	70	48-TSSOP, SSOP	PI6C20800S
5	200	LVTTL	3.3, 2.5	100	8-SOIC, TSSOP	PI6C22405
5	220	LVTTL	3.3, 2.5	100	8-SOIC, TSSOP	PI6C22405-1H
4	100	HCSL	3.3	50	28-SSOP, TSSOP	PI6C20400A
4	100	HCSL	3.3	50	28-SSOP, TSSOP	PI6C20400B
4	100	HCSL	3.3	50	20-TQFN	PI6PCIEB24



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