

Timing



Precise Timing References & Clock Distribution Solutions

■ Timing ICs

- ▶ **FlexOut™ Clock Generators**
 - ◆ 79fs phase jitter
- ▶ **HiFlex™ Clock Generators**
 - ◆ As low as 0.2ps phase jitter
- ▶ **Buffers**
 - ◆ FlexOut™ Buffer < 0.01ps additive jitter
 - ◆ 6GHz LVPECL, CML Buffers
- ▶ **Broad Portfolio**
 - ◆ Buffers, Generators, Zero Delay Buffer Jitter Cleaner
 - ◆ Large industry pinout match

■ Real Time Clocks

- ◆ IC solution and embedded crystal solution
- ◆ Small size 2x3 for RTC IC, 4x4 for RTC embedded crystal solution

■ Crystals & Crystal Oscillators (XO)

- ▶ **ASSPXO/VCXO**
 - ◆ 1G/10G/40Gb Ethernet, Fibre channel, SATA/SAS, PCIe, SONET/SDH
 - ◆ Used in tier 1 40Gb Ethernet reference designs
- ▶ **Programmable XO (HiFlex™ XO)**
 - ◆ Pre-programmed 4 Freq in one MPN
 - ◆ Differential: 10~400MHz; CMOS: 10~212MHz
- ▶ **MHz XO**
 - ◆ Standard to ultra low jitter (<0.1ps)
 - ◆ LVPECL, LVDS, HCSL; up to 800MHz
 - ◆ CMOS -1~212.5MHz
 - ◆ Size: 7x5 to 2x1.6
- ▶ **32.768kHz XO**
 - ◆ Tight stability: 25ppm
 - ◆ I_{DD} as low as 10μA (typ.)
 - ◆ Size: 7x5 to 2x1.6
- ▶ **VCXO - CMOS, LVPECL & LVDS**
 - ◆ High temp and high stability lines
 - ◆ Size: 7x5 to 2.5x2
- ▶ **TCXO/VCTCXO 0.5ppm ~ 5ppm**
 - ◆ Clipped Sinewave/CMOS, Size: 3.2x2.5, 2.5x2
- ▶ **Crystals (Xtals) - kHz and MHz (SMD)**
 - ◆ Up to 66MHz
 - ◆ Size: down to 1.6x1.2

* All Package Dimensions = mm

About Pericom

Pericom® Semiconductor Corporation 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. Company is based in Milpitas, California, with design centers and technical sales and support offices around the world. Pericom was recently acquired by Diodes Incorporated (NSDAQ: DIOD). Learn more at www.pericom.com.

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Within the computer, communications, and consumer markets, Pericom focuses on high-growth segments. This focus allows alignment between multi-product penetration opportunities and Pericom's technology focus.

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- Experienced management team
- Financially Strong



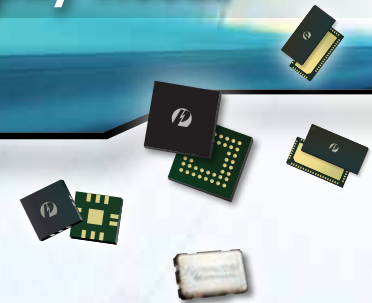
ENABLING SERIAL CONNECTIVITY FOR ALL HIGH-SPEED PROTOCOLS:

USB Type-C™	HDMI/DVI
USB 3.0	DISPLAYPORT
XAUI/RXAU1	PCI EXPRESS 1/2/3
SAS 2.0/3.0	1/10/40Gb ETHERNET
SATA 2.0/3.0	LVDS

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For all your Timing, Switching, Connectivity & Signal Integrity Needs



Pericom Semiconductor Corporation
1545 Barber Lane, Milpitas CA 95035, USA
Tel: **Europe:** 1-408.232.9090 / **USA:** 1-408-232-9100

Signal Integrity

Protocol Specific Signal Integrity Solutions



- **PCIe 1.0/2.0/3.0 ReDrivers™**
 - ◊ Interleave pinouts for lowest crosstalk
 - ◊ Advanced low power, small TQFN packages
 - ◊ Fully linear amplifier passes all PCIe 3 link training signals 1, 4, and 8 channel pinouts
- **10Gb ReDrivers™**
 - ◊ 10Gb/40Gb covering SFI, XFI and KR applications
 - ◊ Advanced low power, small TQFN packages
 - ◊ Fully linear amplifier passes all KR link training signals 1, 4, and 8 channel pinouts
- **USB 3.0 ReDrivers™**
 - ◊ Smallest packages for mobile platforms
 - ◊ Only USBIF certified vendor
 - ◊ 1.0V ~3.3V lower V_{DD} options
 - ◊ Single/Dual Channel options
- **SATA 2.0/3.0 ReDrivers™**
 - ◊ 2/4/8 Channel offering
 - ◊ SATA 3.0 fully compliant
- **SAS 2.0/3.0 ReDrivers™**
 - ◊ Low voltage/power options
 - ◊ Advanced low power, small TQFN
 - ◊ PinStrap or I²C programming
- **XAUI/RXAUI ReDrivers™**
 - ◊ 6.25Gb, 1/2/4 port options
- **HDMI/DisplayPort ReDrivers™**
 - ◊ HDMI 2.0/1.4 and DP 1.3/1.2 compliant
 - ◊ Linear/Limiting equalization
 - ◊ Very low additive jitter

Connectivity

Broadest, Bridging & Routing Solutions



- **PCIe 1.1/2.1 Packet Switches**
 - ◊ Clock buffer integration
 - ◊ Low power, smaller package
 - ◊ From 3 port/3 lanes to 16 port/24 lanes
- **PCIe/PCI/PCIX Bridges**
 - ◊ Largest selection in the industry
 - ◊ Both native and legacy mode options
- **SPI/I²C/8bits to UART**
 - ◊ SPI/I²C/8bits to 1/2/4/8 UART bridge
 - ◊ Low power
 - ◊ Compatible QFN, TSSOP, QFP packages
- **PCIe to UART**
 - ◊ 2, 4 and 8 port single chip options
 - ◊ RS232/422/485 support
- **PCIe to USB/PCIe**
 - ◊ PCIe to 4 USB port controller
 - ◊ PCIe to 4 USB + 2 PCIe ports
 - ◊ Many power management options
- **Home Appliance**
 - ▶ **Chargers**
 - ◊ Li-ion/NIMH controllers
 - ▶ **DC Motor Controllers**
 - ◊ Fully integrated motor driver/controllers
 - ▶ **Heating Controllers**
 - ◊ Sensorless, fast heat up element control
 - ▶ **Iron Controllers**
 - ◊ Proprietary position sensing smart controller
 - ▶ **Passive Infrared Sensor Signal Processor**
 - ◊ Lighting, smart home appliance & surveillance camera applications
 - ▶ **Remote Controllers**
 - ◊ Complete family of encoder/decoder controllers for toys
 - ▶ **Timer ICs (Adjustable, Fixed)**
 - ◊ Supports 110/220V AC supply
 - ◊ Direct relay drive capability

Switching

High Performance Switching Solutions



- **High Speed Signal Switch & Multiplexers**
 - ▶ **USB2/USB3/USB3.1/Type C Switches**
 - ◊ Largest family of high bandwidth MUX options
 - ◊ Fully compatible with USB specifications
 - ▶ **Thunderbolt Switches**
 - ◊ Fully integrated 10Gb switch, 3-Port Mux/Demux
 - ▶ **HDMI/DP Video Switches**
 - ◊ HDMI 2.0 and DP 1.3 compliant
 - ◊ High bandwidth, low insertion loss
 - ▶ **PCIe Gen 2.0/3.0/10Gb/12Gb/XAUI/SAS2/3 SATA2/3**
 - ◊ Lowest Insertion and crosstalk loss
 - ◊ High bandwidth, protocol specific
 - ▶ **VGA Switches**
 - ◊ Auto video DAC disable, small package
 - ▶ **LAN Switches**
 - ◊ Gigabit Ethernet redundant switching/docking/panel switching application
 - ▶ **USB Charging Controllers**
 - ◊ Support all popular phones and tablets
 - ◊ Integrated voltage, current and thermal protection
- **Interface Logic**
 - ▶ **LVDS**
 - ◊ Legacy family of PI90XX Receivers/Transceivers
 - ▶ **Standard Logic**
 - ◊ Complete family of bus/analog switches
 - ▶ **Voltage Translation/Level Shifters**
 - ◊ Auto sense current direction
 - ◊ All popular voltage and I/O levels
 - ▶ **I²C Mux/Switches & IO Expanders**
 - ◊ Complete family of I²C Mux/Switches and IO expanders
- **Power Management ICs**
 - ▶ **USB Power Switches**
 - ◊ Complete fault protection
 - ▶ **Load Switches**
 - ◊ Unique linear turn on, lowest industry power
 - ▶ **LDO Voltage Regulators**
 - ◊ Low noise, high ripple rejection
 - ◊ Super tiny packages (0.8x0.8)
 - ▶ **Micro Processor Supervisory ICs**
 - ◊ Complete family of multi/single channel voltage monitors