

Bandwidth Barrier-Breaking FPGAs

adds up to 66 transceivers and partial reconfiguration

Altera claims it has broken through the "bandwidth barrier" with the 28nm Stratix V FPGAs. The GX version, the first device available, supports applications with 600Mbit/s to 12.5Gbit/s transceivers. The GT version is claimed to be the industry's only FPGA with integrated 28Gbit/s transceivers and is targeted at 100G systems and beyond. The GS version is optimised for high-performance DSP applications with 600Mbit/s to 12.5Gbit/s transceivers. Finally, the E version is the highest density and is suitable for ASIC prototyping, emulation or high-performance computing applications. The FPGAs offer up to 1.6Tbit/s serial switching capability and provide up to 1.1million logic elements, 53Mbits of



embedded memory, 3,680 18x18 multipliers and integrated transceivers operating at up to 28Gbit/s, setting a new benchmark in the industry. The devices feature the company's Embedded HardCopy

Blocks to provide the equivalent of 700K additional logic elements with 65% lower power compared to a soft logic implementation. The GX and GS models feature up to 66 high-performance, low-power transceivers operating up to 12.5Gbit/s. All FPGAs support and meet compliance 3G, 6G and 10G protocols and electrical standards such as Interlaken and PCI Express. The devices also provide direct interoperability. An adaptive logic module architecture adds up to 800k registers. Partial reconfiguration allows designers to reconfigure part of the FPGA while other sections remain running.

ALTERA EUROPE

www.epn-online.com/search?search_keyword=40709

Plastic Circular Connectors

suit wheeled armoured vehicles

ITT Interconnect Solutions' circular APD product family, originally designed to meet the automotive norm DIN72585 (now ISO15170), is a suitable connector for certain wheeled armoured vehicle applications if military specifications are not required. These plastic connectors are lightweight, cost effective, easy to assemble, and offer the additional security of a secondary locking system for high pin counts. The



connectors handle up to 48V and are readily available in a range of layouts from 1- to 51-way with features such as high vibration resistance, resistance to fluids, and high sealing ratings up to IP67/IP69K. Specified to ISO 15170, they are available with stamped or machined contacts, and mechanical and colour coding.

ITT INTERCONNECT SOLUTIONS

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5mm Through-Hole LED Lamps

feature high luminous intensity

Avago Technologies has announced a new series of 5mm green and blue high-brightness, high-performance, through-hole LEDs for use in electronic sign and signal applications. The HLMP-Cxxx series round LED lamps provide high-reliability performance and high luminous intensity in electronic signs to help improve the contrast ratio and readability in sunlight. These LEDs are also suitable for use in traffic signs, variable



message signs, and monochrome signs. Each of the LEDs are made with an advanced optical-grade epoxy offering high temperature and high moisture resistance. The package epoxy has high ultraviolet resistivity, which can reduce the effects of long-term exposure to direct sunlight. These LEDs are Pb Free and RoHS compliant.

AVAGO TECHNOLOGIES

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600V Power MOSFETs

feature Super Junction FET technology

Vishay Intertechnology has released four 600V power MOSFETs that feature the Super Junction FET technology. The SiHP22N60S and SiHF22N60S are available in TO220 and TO220 FULLPAK packages respectively. The SiHG22N60S features the TO247 package, and SiHB22N60S comes in the TO263 package. The devices feature 0.190Ω maximum on-resistance at a 10V gate drive. This low RDS (on) translates into low conduction losses



that save energy in PFC (power factor correction) and PWM (pulsewidth modulation) applications in a range of electronic systems, including LCD TVs, PCs, servers, SMPS (switch mode power supplies) and telecom systems. The devices feature a gate charge of 98nC and high repetitive (EAR) avalanche energy capabilities.

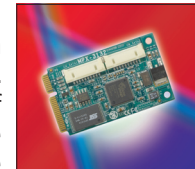
VISHAY INTERTECHNOLOGY

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PCI Express Mini Card

has dual external Serial ATA ports

The new MPX-3132 from BVM is a high performance PCI Express mini card with two eSATA (external Serial ATA) ports. Each eSATA port has a bandwidth of 3Gbits/s and the card, based on the SiI3132 SteelVine controller, uses frame information structure based switching with a balancing algorithm to ensure a fair allocation of available bandwidth to each drive, aggregating the throughput to the single-lane PCIe host. The unit



also supports port multipliers. Available with drivers for Windows and Linux, the card supports RAID 0, 1 and BIG drive spanning across two independent drives. When connected to a port multiplier, RAID 0, 1, 10 and BIG drive spanning are supported, as well as RAID 5 using a Silicon Image software RAID driver.

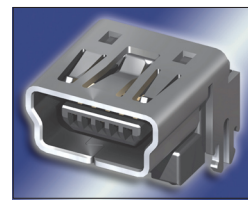
BVM

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5Pin Mini Connector

features two plastic guide posts

Suyin offers the 020200MB005XX32ZX 5pin mini USB female connector. The connector's shape enables placement of small components such as chip capacitors or chip resistors on the PCB beneath it. The right-angle, surface-mount, type-B connector measures 9x7.7x6mm. Two plastic guide posts enable precise placement. Two additional through-hole soldering pins ensure a suitable hold on the board during



insertion and extraction processes. The three SMD soldering surfaces located on the closed sides provide additional mechanical stability as well as grounding/shielding. Reliability is specified at 5000 mating cycles, and the operating temperature ranges from -40 to +105°C.

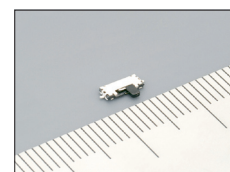
SUYIN

www.epn-online.com/search?search_keyword=39961

Smallest Slide Switch

is low-profile for mobile device use

ALPS Electric has developed the SSAJ series of 0.7mm high slide switches for use in compact devices including mobile phones, digital cameras and compact music players which, as they become slimmer, require smaller, thin and compact slide switches placed on the side of the device. The slide switch measures 5.5x2.5x0.7mm, which is a 36% reduction in volume to decrease the space required on a circuit board compared with



the company's conventional SSAD products. Moreover, this slide switch supports lead-free soldering. For durability, the operational knob on the slide switch is reinforced by a metal plate inserted inside its plastic body. For tactile feedback, there is a plate spring which realises an operating force of 1.5N.

ALPS ELECTRIC EUROPA GMBH

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