

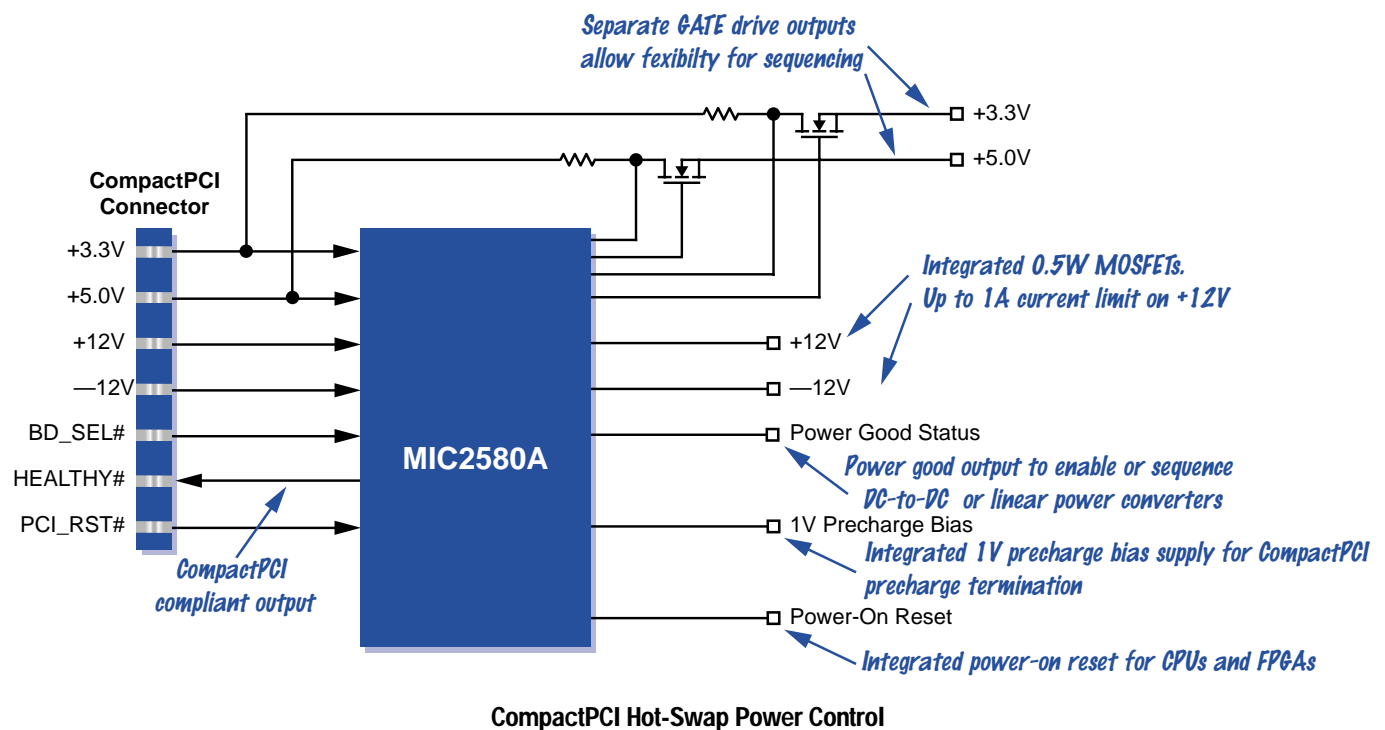
Highest Integrated Single-Slot Power Controller for Hot Swap CompactPCI™

The MIC2580A integrates many functions that simplify the design of CompactPCI hot swap designs. It integrates the 1V precharge bias for Compact PCI termination in addition to supporting the CompactPCI HEALTHY# signal.

Additionally, it provides a programmable power-on reset signal for FPGAs and CPUs. It also integrates two 0.5Ω MOSFETs to support CompactPCIs ±12V power requirements. All of this in a small 24-pin TSSOP package that allows for mounting on either side of the PCB. We also supply an evaluation board to speed up your CompactPCI power distribution design efforts.

Features

- ◆ Supports CompactPCI and PCI Hot-Plug Power Requirements
- ◆ Integrated 1V Precharge Bias Generator Reduces Space and Cost for CompactPCI
- ◆ Integrated Power-On Reset Generator
- ◆ Supports CompactPCI HEALTHY# Signal
- ◆ Integrated Filters Eliminate False Nuisance Tripping on /FAULT and /PWRGD Status Signal



Datasheet: <http://www.micrel.com/product-info/products/mic2580a.shtml>

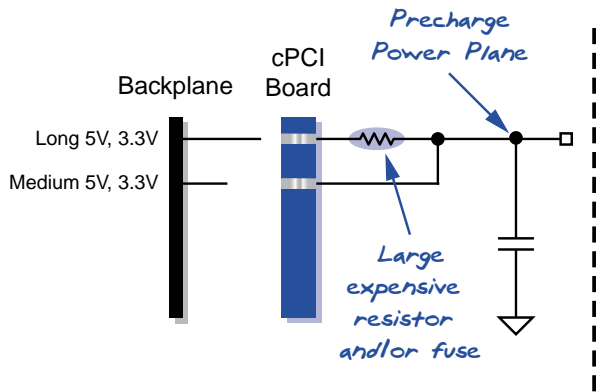
CompactPCI™ is a trademark of the PCI Industrial Computers Manufacturing Group.
SMBus™ is a trademark of Intel Corporation.

CompactPCI Power Distribution Solutions

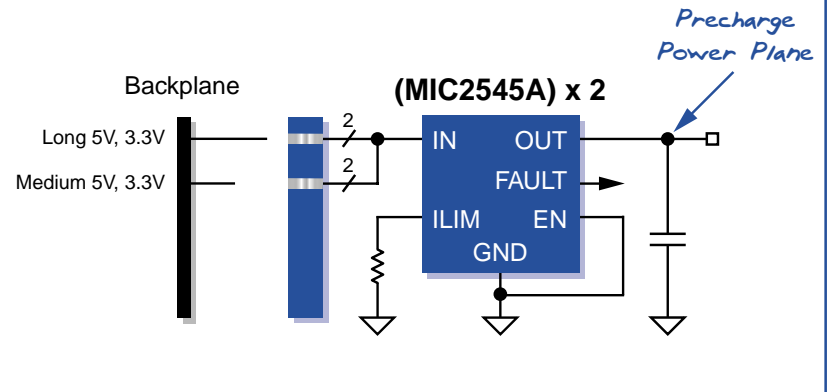
Micrel also offers devices that simplify your design efforts. Many designers employ large, expensive fuses to support CompactPCI early power protection. However, with the MIC2545 integrated protected MOSFET switch

you can replace those components with an SOP-8 package and obtain superior performance in terms of very low on-resistance and reliable, predictable over-current protection for both the 3.3V and 5V power planes.

Standard Design



Micrel



CompactPCI Early Power Plane Protection

Micrel Advantages

- ◆ No large, expensive protection resistors or fuses
- ◆ No need to use medium pins for shorting
- ◆ MIC2545A provides programmable, guaranteed current-limit protection regardless of output capacitance in small SOP-8 package

Other Leading Products for your CompactPCI Design

Product	Function	Notes	Package
MIC74	SMBus™ I/O Expander with Fan Speed Control		QSOP-16
MIC184	Single Pin SMBus Temperature Sensor		MSOP-8, SOP-8
	SSTL Terminator for DDR Memory	AN-35 on website	N/A
MIC502	PWM Fan Speed Controller	Supports up to two zones. Controls fans at any voltage.	SOP-8
MIC37xxx	High-Current LDOs up to 5A	Fixed down to 1.5V, adjustable down to 1.24V, only 500mV (max.) dropout	SOT-223, SOP-8

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