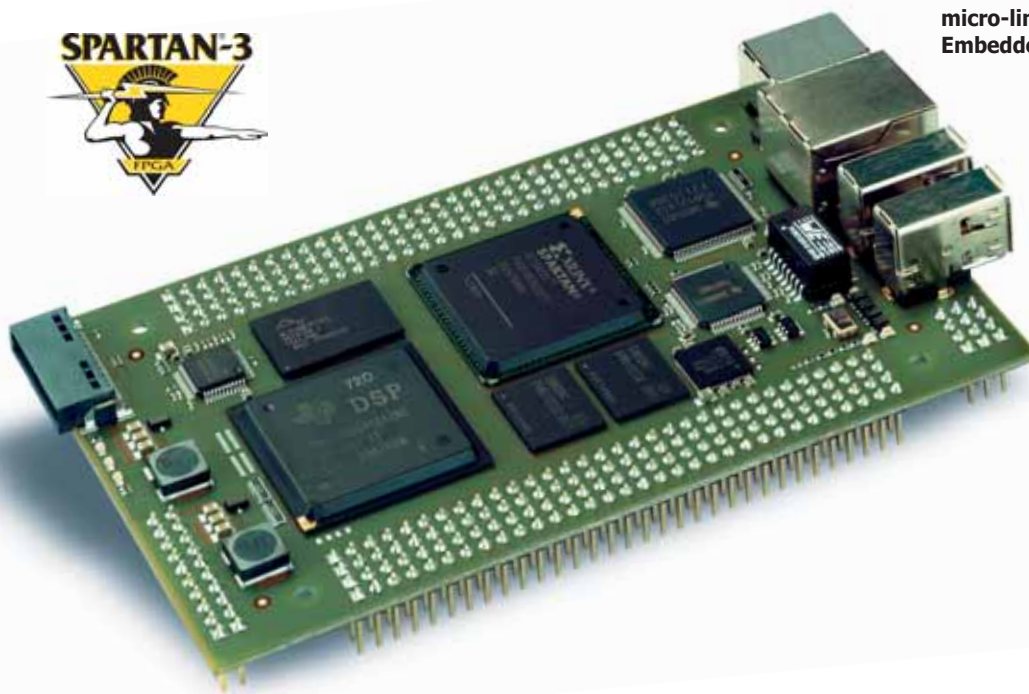


**TRAQUAIR**  
www.traquair.com

## Compact DSP & FPGA Solutions

**SPARTAN-3**



micro-line C6412Compact  
Embedded DSP/FPGA board

The micro-line C6412Compact is a high-performance single-board DSP/FPGA solution, offering exceptional capabilities and flexibility.

Measuring only 72 x 120mm, it combines a Xilinx Spartan-3 FPGA with a powerful Texas Instruments TMS320C6412 integer DSP processor, up to 128MBytes of SDRAM, 8MBytes of FLASH ROM, 10/100 Base-T Ethernet, two independent IEEE 1394a FireWire interface controllers, a USB 2.0 interface, as well as optional Hard Drive, Compact FLASH and analog I/O support.

It is suitable for stand-alone operation or as a mezzanine daughter card, and has extensive digital I/O and optional PCI interface capabilities for easy integration of external hardware with the on-board resources.

The C6412Compact is a member of an extensive family of embedded DSP/FPGA products. Please see the Traquair website for micro-line boards featuring alternative combinations of high-performance integer and floating-point DSP processors, high-density FPGAs, and I/O capabilities, as well as associated design and integration services.

### **Spartan-3 FPGA**

*1M or 4M System Gates  
up to 96 18x18 Hardware Multipliers  
up to 211 VHDL programmable I/O pins*

### **TMS320C6412 DSP**

*Processor up to 720MHz  
for performance up to 5760MIPS*

### **10/100 Ethernet Interface**

*TCP/IP, UDP, ICMP, IGMP, Telnet,  
HTTP, SMTP, DHCP, POP3, FTP,  
Embedded Web Server*

### **Dual IEEE1394a FireWire Interface Controllers**

*400Mbit/sec Communications  
IIDC DCAM Video Framecapture*

### **USB 2.0 Interface**

*480Mbit/sec Communications  
Easy integration with PCs*

### **Optional Data Storage**

*Connect FireWire enabled Hard Drives  
and CompactFLASH*

### **Optional Analog I/O**

*14- and 16-bit multi-channel A/D/A  
via FPGA I/O pins or DSP EMIF*