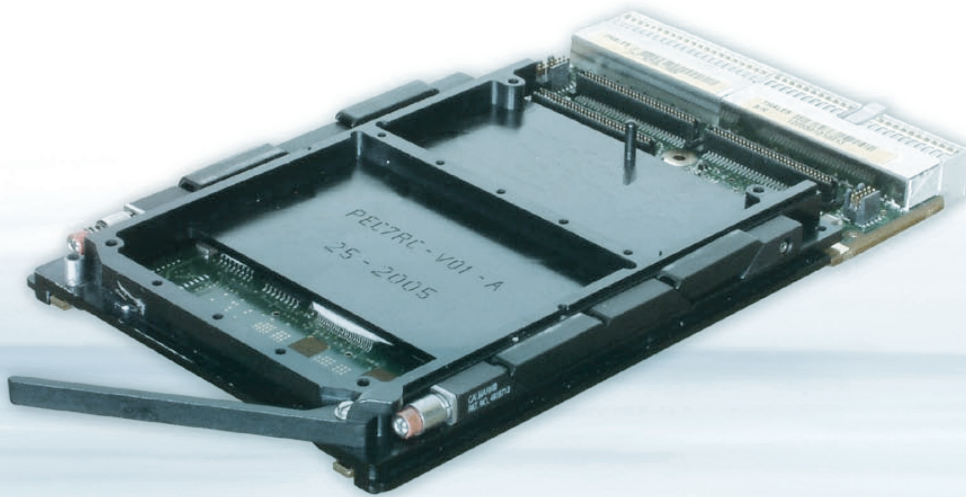


# PowerEngineC7

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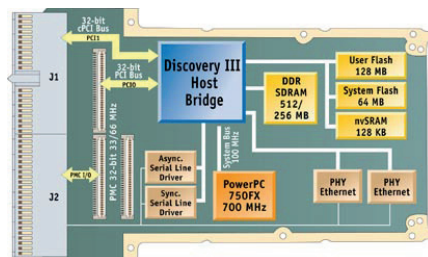
## 3U SINGLE-SLOT PowerPC 750FX CompactPCI® EMBEDDED COMPUTER

- ▶ all-in-one 3U rugged conduction-cooled
- ▶ PCI Mezzanine Card (PMC) slot
- ▶ supports VxWorks 6.2 & 5.5.1

POSSIBILITIES START HERE



The PowerEngineC7 is a new member of the Kontron family of rugged 3U CompactPCI embedded computers. Designed to meet the requirements of compact, real-time systems for the most demanding defense, aerospace, industrial, transportation, and communications applications, the PowerEngineC7 is a result of the combined expertise of Kontron, provider of high-performance, low-power SBCs such as the flagship 6U VME PowerEngine7, and of Thales Airborne Systems, provider of airborne mission computers.



## TECHNICAL INFORMATION

<b>PROCESSOR</b>		<ul style="list-style-type: none"> <li>- PowerPC 750FX processor operating at 700 MHz</li> <li>- L1 cache: 32 KB, 32-byte line, 8-way set associative instruction cache and 32 KB, 32-byte line, 8-way set associative data cache</li> <li>- Dual Integer Unit</li> <li>- IEEE-754 Floating Point Unit</li> <li>- Instruction and Data Memory Management Units (MMU)</li> <li>- Internal 512 KB L2 cache with ECC operating at processor frequency</li> <li>- Very low power implementation</li> <li>- Common on-chip processor debug port (JTAG/COP)</li> </ul>
<b>SDRAM MEMORY</b>		<ul style="list-style-type: none"> <li>- 512 or 256 MB of DDR SDRAM with error correction (ECC)</li> <li>- High-speed 200 MHz memory access</li> <li>- Rugged design with soldered chips</li> <li>- Supports code execution copied from Flash memory</li> <li>- A predefined area of the memory is protected from the PCI and Ethernet accesses and allows the definition of a dedicated PPC communications area</li> </ul>
<b>FLASH</b>		64 MB for System Flash; 128 MB for User Flash
<b>NVSRAM</b>		128 KB with RT clock. No Battery
<b>PMC EXPANSION SLOT – IEEE P1386/1386.1</b>		<ul style="list-style-type: none"> <li>- 32-bit 33/66 MHz PCI bus interface</li> <li>- 3.3V PCI signaling, 5V tolerant</li> <li>- Supports CCPMC Draft Standard VITA 2.0</li> <li>- 46 I/O pins are routed to the cPCI J2 connector</li> <li>- cPCI PMC Carrier Board, to fit in adjacent PCibus slot</li> </ul>
<b>USER I/O AVAILABLE ON CPCI J1 OR J2 CONNECTORS</b>		<ul style="list-style-type: none"> <li>- Dual Ethernet 10/100 port</li> <li>- Asynchronous serial line, EIA-232</li> <li>- Simplified synchronous serial line, EIA-422/485</li> <li>- JTAG access on J1</li> </ul>
<b>ENVIRONMENTAL SPECIFICATIONS</b>	<b>TEMPERATURE RANGE</b> <b>CONFORMAL COATING</b> <b>RELATIVE HUMIDITY</b> <b>ALTITUDE</b> <b>MECHANICAL</b>	VITA47-Class CC4; Operating -40° to +85°C; Storage -45° to +100°C Standard 95% without condensing 1,640 to 60,000 feet - Vibration Sine 22-2000 Hz - 5g Peak - Random VITA47-Class V3 - Shock 40g Peak 20 ms Half Sine Pulse 6 directions
	<b>VOLTAGE REQUIREMENT</b>	3.3V +5% -2.5%; 2.6A typical

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