



Mil-Aero Products



**Your Go-To Supplier for
Defense and Aerospace Products!**

IDT MIL-AERO SOLUTIONS

IDT is committed to the aerospace and defense industry and will continue to support military products for the foreseeable future

- Leader in variety of military Specialized Memory products offered as well as standard memory and logic
- Hermetic Package options include:
C, D, TD – Ceramic Dual Inline Package;
E – Cerpak
F – Flatpack
G – Pin Grid Array;
L – Leadless Chip Carrier
- All current mil offerings have been moved to our new fab partner for long term availability
- Additional options available in COTS type product – Industrial temp (I) plastic package (-40°C to +85°C) offered on most parts
- All IDT military products are QML certified

IDT ELECTRONICS FOR DEFENSE AND AEROSPACE

Since the company's inception in 1980, IDT has been a dedicated supplier of products for the military and aerospace markets. We have a broad product portfolio including high speed SRAMs, multiport memories, FIFOs, high performance logic, VME bridges, Embedded Host Bridges (EHB), RapidIO® switches and PCI-e to RapidIO® bridges, available for military and aerospace applications.

The selector tables on the following pages can be used to identify possible solutions from IDT's broad range of options. Additional commercial and industrial parts can be found on our web pages at www.idt.com.

IDT Military and Aerospace Products

- VME & EHB Products
- FIFOs
- Digital Logic
- RapidIO®
- SRAMs
- Multi-Ports





MULTI-PORT MEMORY SOLUTIONS

- Over 150 Multi-Port products available
- Industry leader over the past 35+ years
- Set nearly all performance/feature standards for the Industry
- Features and performance not available from any other supplier



| Asynchronous Dual Port (5V) | | |
|-----------------------------|-------------------------------------|---|
| Organization | Part Numbers | Features (not for every part listed) |
| 1K x 8 | 5962-86875, 7130, 7140 | Busy, Interrupt, Master, Slave |
| 2K x 8 | 5962-87002, 7132, 7142 | Busy, Master, Slave |
| 2K x 16 | 5962-88610, 5962-88665, 7133, 7143 | Busy, Master, Slave |
| 4K x 8 | 5962-89764, 7134 | Semaphore |
| 4K x 16 | 5962-91662, 7024 | Busy, Interrupt, Master, Semaphore, Slave |
| 8K x 8 | 7005 | Busy, Interrupt, Master, Semaphore, Slave |
| 8K x 16 | 5962-91617, 7025 | Busy, Interrupt, Master, Semaphore, Slave |
| 16K x 8 | 5962-91508, 7006 | Busy, Interrupt, Master, Semaphore, Slave |
| 16K x 16 | 7026 | Busy, Interrupt, Master, Semaphore, Slave |
| FourPort (5V) | | |
| Organization | Part Numbers | Features |
| 2K x 8 | 7052 | Busy |
| Asynchronous SRAM (5V) | | |
| Organization | Part Numbers | Speed Grades (not for every part listed) |
| 2K x 8 | 5962-88740, 5962-89690, 6116, 84036 | 20nS to 150nS |
| 8K x 8 | 5962-38294, 5962-85525, 7164 | 20nS to 100nS |
| 32K x 8 | 5962-88552, 5962-88662, 71256 | 25nS to 100nS |





FIFO TECHNOLOGY

IDT is the Leader in FIFO Technology

- Frequency matching
- Bus-width matching
- Data buffering

IDT FIFO products

*... deliver industry leading performance and densities
... are very cost effective solutions
... deliver the next level of flexibility*

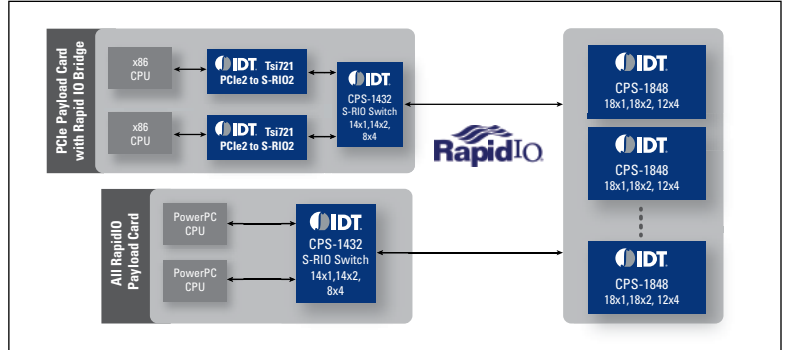


| Asynchronous FIFO (5V) | | | |
|--------------------------|---|--|---|
| Organization | Part Numbers | Features (not for every part listed) | |
| 256 x 9 | 5962-89666, 7200 | Uni-Directional, Empty, Half Full, Full Flag, Retransmit | |
| 512 x 9 | 5962-87531, 5962-89863, 7201 | Uni-Directional, Empty, Half Full, Full Flag, Retransmit | |
| 1K x 9 | 5962-89536, 7202 | Uni-Directional, Empty, Half Full, Full Flag, Retransmit | |
| 2K x 9 | 5962-88669, 5962-89567, 7203 | Uni-Directional, Empty, Half Full, Full Flag, Retransmit | |
| 4K x 9 | 5962-89568, 7204 | Uni-Directional, Empty, Half Full, Full Flag, Retransmit | |
| 8K x 9 | 5962-91677, 7205 | Uni-Directional, Empty, Half Full, Full Flag, Retransmit | |
| 16K x 9 | 5962-93177, 7206 | Uni-Directional, Empty, Half Full, Full Flag, Retransmit | |
| 32K x 9 | 7207 | Uni-Directional, Empty, Half Full, Full Flag, Retransmit | |
| Logic FCT (5V) | | | |
| Bus Width | Part Numbers | Type | |
| x8 | 54FCT240T, 54FCT244T, 5962-92203, 5962-92213 | Fast CMOS Octal Buffer/Line Driver | |
| | 54FCT245T, 5962-92214 | Fast Octal Bi-Directional Transceiver | |
| | 54FCT373T, 54FCT573T, 5962-92238, 5962-92217 | Fast Octal Transparent Latch | |
| | 54FCT374T, 54FCT574T, 5962-92218, 5962-92222 | Fast Octal D register | |
| | x16 | 54FCT162244T, 54FCT16244T, 5962-92271, 5962-92257 | Fast CMOS 16-Bit Buffer/Line Driver |
| | | 54FCT162245T, 54FCT16245T, 5962-92258, 5962-92272 | Fast CMOS 16-Bit Bi-Directional Transceiver |
| VME | | | |
| Part Numbers | | Features (not for every part listed) | |
| VME | CA91C142D (Universe II) | VME64, PCI 33Mhz, Extended temp (-55°C to 125°C) | |
| EHB | | | |
| Part Numbers | Features (not for every part listed) | | |
| Host Bridges for PowerPC | TSI108, TSI109, TSI110 | PowerPC 7xx/74xx, PCI-X, GbE interfaces | |
| PowerSpan II | CA91L8260B | PowerQUICC II/PowerPC 7xx PCI bridge | |
| Qspan II | CA91L862A | PowerQUICC PCI bridge | |



RapidIO® FOR DEFENSE AND AEROSPACE

- RapidIO® Error Management Extension support including Time-to-Live enables fault-tolerant systems
- VITA 41, Open VPX, and ATCA fabric mappings enable rapid development of modular, standards-based systems
- True peer-to-peer networking allows scaling of arbitrary topology and simplifies hot swap software implementation
- Per-port filter feature allows blocking errant packets or malicious attack (for example, denial of service, system memory reads and writes)

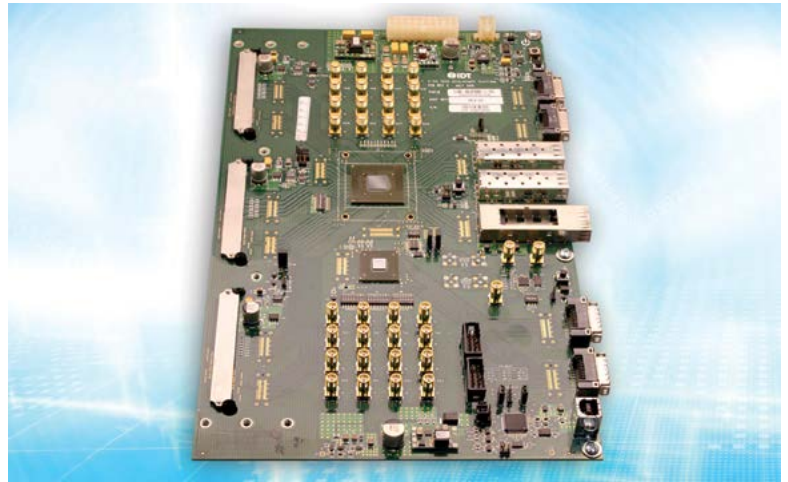


ECOSYSTEM AND TOOLS

A variety of software tools, and hardware platforms are available from third party companies which support IDT RapidIO® Switches.

SOFTWARE AND HARDWARE ECOSYSTEM

- RapidIO® Development Platforms
- RapidFET JTAG edition software support
- RapidIO® Gen2 & Gen3 (10xN) Endpoint Intellectual Property for ASIC, CPU and DSP
- RapidIO® Linux support
- Power Calculator tool
- HSPICE and IBIS models
- System Modeling Tool



| RapidIO® Generations | Part Numbers | Ports | Bandwidth | Features |
|-----------------------------|--------------|----------------|-----------|--|
| RapidIO® Gen2 | CPS-1848 | 12x4/18x2/18x1 | 240 Gbps | 20 Gbps per port, 100 ns cut through latency, <300mW per 10 Gbps, 29x29 FCBGA |
| | CPS-1432 | 8x4/14x2/14x1 | 160 Gbps | 20 Gbps per port, 100 ns cut through latency, <385mW per 10 Gbps, 25x25 FCBGA |
| | CPS-1616 | 4x4/8x2/16x1 | 80 Gbps | 20 Gbps per port, 100 ns cut through latency, <440mW per 10 Gbps, 21x21 FCBGA |
| | SPS-1616 | 4x4/8x2/16x1 | 80 Gbps | 20 Gbps per port, 100 ns cut through latency, <440mW per 10 Gbps, 21x21 FCBGA, Security |
| | TSI721 | 2x4/2x2/2x1 | 16 Gbps | PCIe Gen2 to RapidIO® Gen2 Bridge, 8 DMA and Messaging Channels, 2W 300ns store and forward latency, 13x13 FCBGA |
| RapidIO® 10xN (Gen3) | RXS1632 | 8x4/16x2/16x1 | 400 Gbps | 50 Gbps per port, 100 ns cut through latency, < 250mW per 10 Gbps, 29x29 FCBGA |
| | RXS2448 | 12x4/24x2/24x1 | 600 Gbps | 50 Gbps per port, 100 ns cut through latency, < 250mW per 10 Gbps, 33x33 FCBGA |

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