

# 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](http://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*

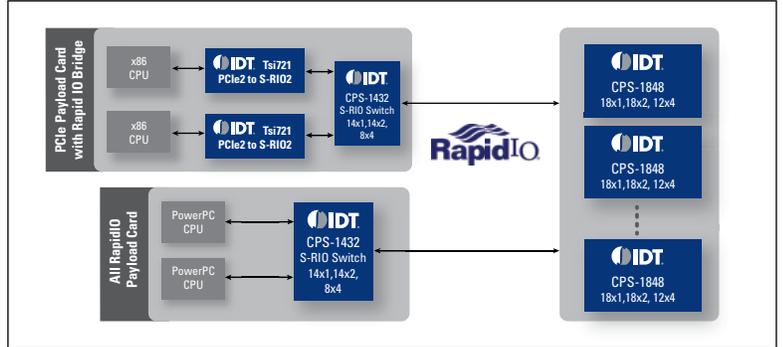


Asynchronous FIFO (5V)			
Organization	Part Numbers	Features (not for every part listed)	
256 x 9	5962-89666, 7200	Uni-Directional, Empty, Half Full, Full Flag, Retransmit	
512 x 9	5962-87531, 5962-89863, 7201	Uni-Directional, Empty, Half Full, Full Flag, Retransmit	
1K x 9	5962-89536, 7202	Uni-Directional, 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)

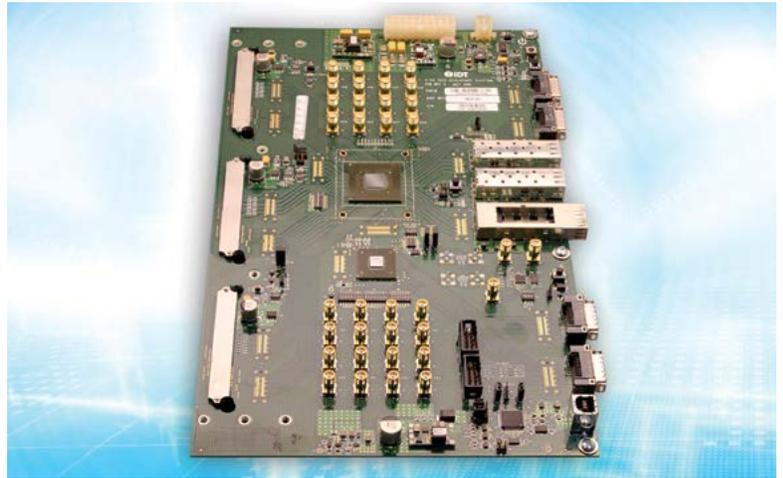


## ECOSYSTEM AND TOOLS

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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<http://idt.com/support/technical-support>