PRODUCT BRIEF

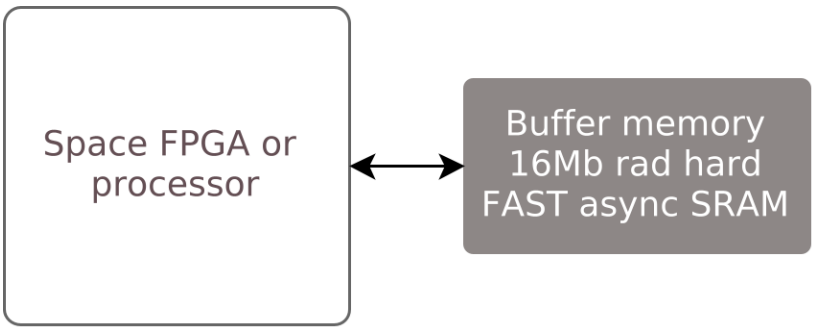
16 Mb rad hard FAST async SRAM

Infineon's HiRel FAST async SRAMs with RADSTOP™ for extreme environments

Infineon's FAST 16-Mbit asynchronous Static RAMs designed with Infineon's patented RADSTOP™ Technology is well suited for space as well as other harsh environment applications. The 16-Mbit SRAM is available in 8, 16, and 32-bit wide configurations and features embedded ECC for single-bit error correction. The ECC logic can detect and correct single-bit error in any read data word during the read cycles. Easy memory expansion is provided by utilizing OE, CE and tri-stated output drivers.

Infineon's state-of-the art RADSTOP™ Technology is radiation hardened through propriety design and process hardening techniques. Our asynchronous Static RAM devices are the fastest QML-V qualified devices operating up to 100 MHz at maximum datasheet temperature of 125°C. They meet all radiation requirements and are well suited for applications for payload processing buffer memory, sensors and switch applications for extreme environments.

Infineon's radiation-hardened memories are QML-V certified, meeting the reliability and lifecycle demands of extreme environments. Our RADSTOP™ memory solutions enhance overall system computing limits while providing Size, Weight, and Power (SWaP) benefits and greater design flexibility.



Key benefits

Certified reliability
- DLAM QML-V
- QCI, datapacks
- RHA, WLAT

Ultimate radiation
- >200 Krad TID
- >60 LET SEL immunity
- <3e^{-12} Err/bit.day

Product features
- 16-Mbit (2-Mbit x8, 1-Mbit x16, 512-Kbit x32)
- 10 ns access times
- MIL-PRF-38535
- Embedded ECC (SEC)
- Automatic power-down when deselected
- TTL compatible inputs and outputs

Key applications
- Payload processing
- Sensors
- Switches

Differentiated memory portfolio
- Performance
- Density
- Reliability
- Longevity

Commercial aviation | Space | Defense technology

www.infineon.com/hirelmemory

PRODUCT BRIEF

16 Mb rad hard FAST async SRAM

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Key features

- 2-Mbit x8, 1-Mbit x16, 512-Kbit x32 bus-width configurations
- 8 ns (85°C), 10 ns (125°C) access times
- 1.8–5.0 V operating voltage
- -55 to +125°C military temperature grade
- Embedded ECC (SEC)
- Low active power
- Low CMOS standby power
- 1.0 V data retention
- Automatic power-down when deselected
- Transistor-Transistor Logic (TTL) compatible inputs and outputs
- Easy memory expansion with CE and OE features
- (2M x 8) 36-lead ceramic flat pack (CFP) package
- (1M x 16) 54-lead ceramic TSOP (CTSOP) package
- MIL-PRF 38535 compliant
- QML-V qualified



Technical support

Infineon datasheet

CYRS1069G 16 Mb FAST SRAM with RADSTOP™
CYRS1061G30 16 Mb FAST SRAM with RADSTOP™

DLAM datasheet

5962-20202,16 Mb FAST SRAM with RADSTOP™

Product table

Density	Description	Infineon P/N	Operating temperature	Qual level	TID[1]	SEL[2]	SEU[3]	SEFI[4]	PD[5]
16-Mbit	Rad hard FAST Async SRAM (1M x 16)	CYRS1061G30-10GGMB	-55 to +125°C	–	200	>50	$<3.0e^{-12}$	>80 LET	$<1e^{9}$
	Rad hard FAST Async SRAM (1M x 16)	5962R2020201VXC	-55 to +125°C	DLAM QML-V	200	>50	$<3.0e^{-12}$	>80 LET	$<1e^{9}$
	Rad hard FAST Async SRAM (1M x 16)	CYPT1061G30-10GGMB	-55 to +125°C	PROTOTYPE	–	–	–	–	–
	Rad hard FAST async SRAM (2M x 8)	CYRS1069G30-10FZMB	-55 to +125°C	–	200	>50	$<3.0e^{-12}$	>80 LET	$<1e^{9}$
	Rad hard FAST async SRAM (2M x 8)	5962R2020202VYC	-55 to +125°C	DLAM QML-V	200	>50	$<3.0e^{-12}$	>80 LET	$<1e^{9}$
	Rad hard FAST async SRAM (2M x 8)	CYPT1069G30-10FZMB	-55 to +125°C	PROTOTYPE	–	–	–	–	–

Note: 5962 part number supersedes CYRS
1) Total Ionizing Dose [Krad (Si)]
2) Single Event Latchup [LET] @ 95°C
3) Single Event Upset [err/bit.dy] Geo sync-solar min
4) Single Event Functional Interrupt [err/dev.dy] geo sync-solar min
5) Prompt Dose [rad (Si)/s]

www.infineon.com/hirelmemory

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