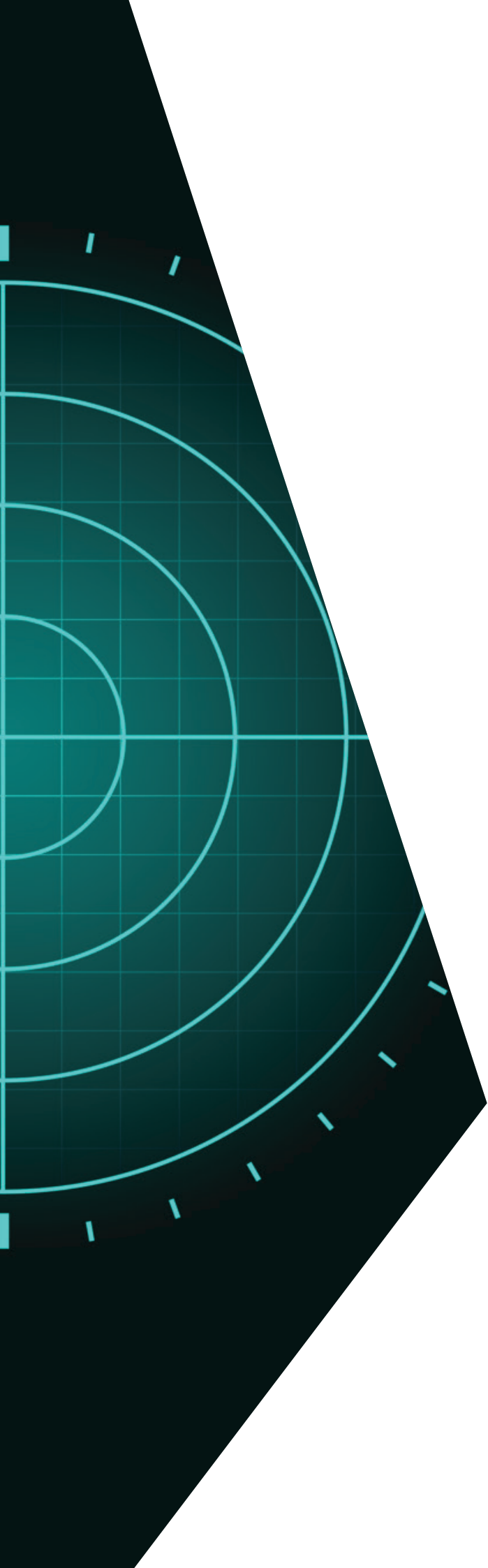


Infineon memory solutions for defense applications





DEFENSE APPLICATIONS

High reliability memories

Aerospace and defense platforms require reliable, secure, and robust memory solutions capable of meeting strict performance and environmental metrics. Infineon high reliability memories adhere to the most stringent standards in the industry. Dedicated process flows and proprietary manufacturing processes ensure zero-defect products with long lifecycles based on mature and reliable process technologies. Our longevity programs deliver the industry's most trustworthy, long-term product support.

Our mil-temp memories offer a wide selection of volatile and non-volatile memories for applications that meet QML-Q certifications and offer support for mil-aero applications where QML certification may not be required but robust performance and high reliability in extreme environments are a must.



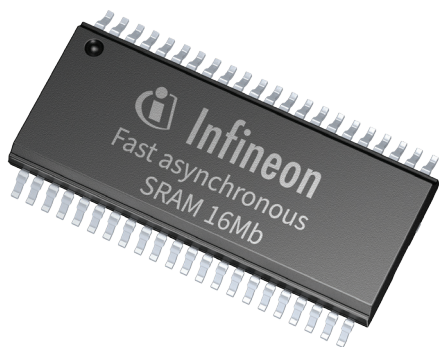
Defense
technology

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High reliability memory solutions for defense applications«



Visit [infineon.com/memory](https://www.infineon.com/memory) for a look at our best-in-class memory solutions.

Infineon's defense memory portfolio offers a wide selection of NOR Flash, F-RAM, nvSRAM, and SRAM memories that provide design options and flexibility while reducing system cost in defense applications.

Our portfolio includes:

Volatile memories

- Synchronous SRAMs
- Asynchronous SRAMs

Non-volatile memories

- Non-volatile SRAM (nvRAM)
- Serial and Parallel F-RAMs
- Serial and Parallel NOR Flash



Infineon's HiRel defense memories are used for several applications such as communications, GPS equipment, and ground-based radar.

Applications

- Our high performance and reliable synchronous and asynchronous SRAMs meet the processing power demands of VPX form factors for defense sensor processing systems and communication equipment
- Our QML-Q certified nvSRAM memories offer the high performance of traditional SRAMs while providing the added benefits of non-volatility and are ideal for error logging in flight data recorders
- For boot code storage, Infineon's NOR Flash memories are well suited for GPS applications
- The F-RAM products are ideal for demanding persistent code storage and fault logging applications for defense applications

Superior reliability

Our mil-temp memories meet automotive quality and are designed and built with ultimate performance in mind. They feature either embedded Error Correction Circuitry (ECC) or Ultra-Low Alpha (ULA) emission mold compounds to protect against soft errors.

Customizable solutions

Infineon custom solutions simplify your design process by solving the challenges you face. Our worldwide partner network and technological expertise enable you to develop innovative products. Custom solutions include:

- Die and wafer sales
- Extreme environmental solutions
- Custom bonding and package solutions
 - Gold bondwires
 - Leaded BGA lead finish

Infinion defense memory portfolio

Sync SRAM

- Operating temp range: -55°C to 125°C
- Qual level: Industrial/Mil Temp
- Product status: Production
- Package type: Plastic
- Endurance @ 125°C: Infinite
- Technology fit rate: 11 FIT

Density	Part number	Description	Package	RoHS compliant	PB free	Shipping type	SEU FIT/Mb (a + n(NYC))	Process node
9 Mbit	CY7C1361KVE33-133AXM	(256k x36) Flow-through	TQFP	Y	Y	Tray	0	65 nm CMOS
18 Mbit	CY7C1370KVE33-167AXM	(512k x36) NoBL	TQFP	Y	Y	Tray	0	65 nm CMOS
18 Mbit	CY7C1381KVE33-133AXM	(512k x36) Flow-through	TQFP	Y	Y	Tray	0	65 nm CMOS
36 Mbit	CY7C1441KV33-133AXM	(1M x36) Flow-through	TQFP	Y	Y	Tray	0	65 nm CMOS
36 Mbit	CY7C1441KV33-133BZM	(1M x36) Flow-through	FBGA	N	N	Tray	0	65 nm CMOS

Async SRAM

- Operating temp range: -55°C to 125°C
- Qual level: Industrial/Mil Temp
- Product status: Production
- Package type: Plastic
- Endurance @ 125°C: Infinite
- Technology fit rate: 11 FIT

Density	Part number	Description	Package	RoHS compliant	PB free	Shipping type	SEU FIT/Mb (a + n(NYC))	Process node
16 Mbit	CY7S1061GE30-10BVM	Async SRAM	BGA	N	N	Tray	0	65 nm CMOS
1 Mbit	CY7C1019DV33-10VXM	Async SRAM	SOP	Y	Y	Tube	0	90 nm CMOS

F-RAM

- Operating temp range: -55°C to 125°C
- Qual level: Automotive/Mil Temp
- Product status: Production
- Package type: Plastic
- Endurance @ 125°C: 10-trillion
- Technology fit rate: 9 FIT

Density	Part number	Description	Package	RoHS compliant	PB free	Shipping type	Data retention	SEU FIT/Mb (a + n(NYC))	Process node
2 Mbit	CY15B102Q-SXM	F-RAM memory serial	EIAJ	Y	Y	Tube	11 khrs @ 125°C	0	130 nm FRAM
2 Mbit	CY15B102N-ZS60XM	F-RAM memory parallel	TSOP	Y	Y	Tube	11 khrs @ 125°C	0	130 nm FRAM
1 Mbit	CY15B101N-ZS60XM	F-RAM memory parallel	TSOP	Y	Y	Tube	11 khrs @ 125°C	0	130 nm FRAM

nvSRAM

- Operating temp range: -55°C to 125°C
- Qual level: QML-Q
- Product status: Production
- Package type: Ceramic
- Endurance @ 125°C: 100k Flash / Infinite SRAM
- Technology fit rate: 1 FIT

Density	Part number	Description	Package	RoHS compliant	PB free	Shipping type	Data retention	SEU FIT/Mb (a + n(NYC))	Process node
256 kbit	STK14C88C-5C35M	Non volatile SRAMs	CERDIP	N	N	Tube	1 yrs @ 125°C	1370	130 nm CMOS
256 kbit	STK14C88C-35C35M	Non volatile SRAMs	CERDIP	N	N	Tube	1 yrs @ 125°C	1370	130 nm CMOS
256 kbit	5962-1821101QXC	Non volatile SRAMs	CERDIP	N	N	Tube	1 yrs @ 125°C	1370	130 nm CMOS
1 Mbit	STK14CA8C-5C35M	Non volatile SRAMs	CERDIP	N	N	Tube	1 yrs @ 125°C	1370	130 nm CMOS
1 Mbit	5962-1821201QXC	Non volatile SRAMs	CERDIP	N	N	Tube	1 yrs @ 125°C	1370	130 nm CMOS
1 Mbit	STK14CA8C-35C35M	Non volatile SRAMs	CERDIP	N	N	Tube	1 yrs @ 125°C	1370	130 nm CMOS

NOR Flash

- Operating temp range: -55°C to 125°C
- Qual level: Automotive/Mil Temp
- Product status: Production
- Package type: Plastic
- Endurance @ 85°C: 100 K
- Technology fit rate: 11 FIT

Density	Part number	Description	Package	RoHS compliant	PB free	Shipping type	Sector info	Data retention	SEU FIT/Mb (a + n(NYC))	Process node
128 Mbit	S25FL128SAGBAEA00	Serial NOR Flash	FBGA	N	N	Tray	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
128 Mbit	S25FL128SAGBAEA03	Serial NOR Flash	FBGA	N	N	Reel	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
128 Mbit	S25FL128SAGBHEA00	Serial NOR Flash	FBGA	Y	Y	Tray	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
128 Mbit	S25FL128SAGBHEA03	Serial NOR Flash	FBGA	Y	Y	Reel	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
256 Mbit	S25FL256SAGBAEA00	Serial NOR Flash	FBGA	N	Y	Tray	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
256 Mbit	S25FL256SAGBAEA03	Serial NOR Flash	FBGA	N	Y	Reel	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
256 Mbit	S25FL256SAGBHEA00	Serial NOR Flash	FBGA	Y	Y	Tray	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
256 Mbit	S25FL256SAGBHEA03	Serial NOR Flash	FBGA	Y	Y	Reel	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
256 Mbit	S25FL256SAGNFE000	Serial NOR Flash	WSON	Y	Y	Tray	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
256 Mbit	S25FL256SAGNFE003	Serial NOR Flash	WSON	Y	Y	Reel	Uniform 64 k sectors	13 yrs	0	65 nm MB Flash
512 Mbit	S25FL512SAGBAEA10	Serial NOR Flash	FBGA	N	N	Tray	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
512 Mbit	S25FL512SAGBAEA13	Serial NOR Flash	FBGA	N	N	Reel	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
512 Mbit	S25FL512SAGBAEC10	Serial NOR Flash	FBGA	N	N	Tray	Uniform 256 k Sectors	13 yrs	0	65 nm MB Flash
512 Mbit	S25FL512SAGBAEC13	Serial NOR Flash	FBGA	N	N	Reel	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
512 Mbit	S25FL512SAGBHEA10	Serial NOR Flash	FBGA	Y	Y	Tray	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
512 Mbit	S25FL512SAGBHEA13	Serial NOR Flash	FBGA	Y	Y	Reel	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
512 Mbit	S25FL512SAGBHEC10	Serial NOR Flash	FBGA	Y	Y	Tray	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
512 Mbit	S25FL512SAGBHEC13	Serial NOR Flash	FBGA	Y	Y	Reel	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
1 Gbit	S70FL01GSAGBHEC10	Serial NOR Flash	FBGA	Y	Y	Tray	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
1 Gbit	S70FL01GSAGBAEC13	Serial NOR Flash	FBGA	N	N	Reel	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
1 Gbit	S70FL01GSAGBAEC10	Serial NOR Flash	FBGA	N	N	Tray	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
1 Gbit	S70FL01GSAGBHEC13	Serial NOR Flash	FBGA	Y	Y	Reel	Uniform 256 k sectors	13 yrs	0	65 nm MB Flash
128 Mbit	S29GL128S13FAEV10	Parallel NOR Flash	FBGA	N	N	Tray	Uniform 256 k sectors	47 yrs	0	65 nm MB Flash
128 Mbit	S29GL128S13FAEV13	Parallel NOR Flash	FBGA	N	N	Reel	Uniform 256 k sectors	47 yrs	0	65 nm MB Flash
512 Mbit	S29GL512S12DHE010	Parallel NOR Flash	FBGA	Y	Y	Tray	Uniform 256 k sectors	47 yrs	0	65 nm MB Flash
512 Mbit	S29GL512S12DHE013	Parallel NOR Flash	FBGA	Y	Y	Reel	Uniform 256 k sectors	47 yrs	0	65 nm MB Flash
1 Gbit	S29GL01GS12DHE020	Parallel NOR Flash	FBGA	Y	Y	Tray	Uniform 256 k sectors	47 yrs	0	65 nm MB Flash
1 Gbit	S29GL01GS12DHE023	Parallel NOR Flash	FBGA	Y	Y	Reel	Uniform 256 k sectors	47 yrs	0	65 nm MB Flash
1 Gbit	S29GL01GS12DAE020	Parallel NOR Flash	FBGA	N	N	Tray	Uniform 256 k sectors	47 yrs	0	65 nm MB Flash
1 Gbit	S29GL01GS12DAE023	Parallel NOR Flash	FBGA	N	N	Reel	Uniform 256 k sectors	47 yrs	0	65 nm MB Flash

Where to Buy

Infineon distribution partners and sales offices:

www.infineon.com/WhereToBuy

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Infineon offers its toll-free **0800/4001** service hotline as one central number, available 24/7 in English, Mandarin and German.

Germany	0800 951 951 951 (German/English)
India	000 800 4402 951 (English)
USA	1-866 951 9519 (English/German)
Other countries	00* 800 951 951 951 (English/German)
Direct access	+49 89 234-0 (interconnection fee, German/English)

* Please note: Some countries may require you to dial a code other than “00” to access this international number, please visit www.infineon.com/service for your country!



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