

PARALLEL NOR FLASH MEMORY DEVICES (CONT.)

Mfg. Part No.	Packaging	Memory Size	Supply Voltage	Stock No.	Price Each 1-9+
CFI, Parallel, 4M x 8bit / 2M x 16bit					
● S29JL032J70TFI310	TSOP-48	32Mbit	2.7V-3.6V	90R9335	---
● S29JL032J70TFI420	TSOP-48	32Mbit	2.7V-3.6V	90R9338	---
CFI, Parallel, 8M x 8bit / 4M x 16bit					
● S29JL064J70TFI000	TSOP-48	64Mbit	2.7V-3.6V	90R9341	---
● S29JL064J55TFI000	TSOP-48	64Mbit	2.7V-3.6V	90R9339	---
Parallel, 1M x 8bit					
● S29AL008J70BFI010	FPBGA-48	8Mbit	2.7V-3.6V	43P9761	---
● S29AL008J55TFIR10	TSOP-48	8Mbit	2.7V-3.6V	43P9760	---
Parallel, 2M x 8bit					
● S29AL016J55TFIR10	TSOP-48	16Mbit	2.7V-3.6V	55R7084	1.97
Parallel, 4M x 8bit					
● S29JL032J70TFI010	TSOP-48	32Mbit	2.7V-3.6V	90R9331	3.47
● S29JL032J70TFI210	TSOP-48	32Mbit	2.7V-3.6V	90R9333	---
Parallel, 8M x 16bit					
● S29PL127J70BAI000	FPBGA-80	128Mbit	2.7V-3.6V	70K5152	---
Parallel, 8M x 8bit					
● S29JL064J70TFI003	TSOP-48	64Mbit	2.7V-3.6V	84W9353	---

PIM_211875

PARALLEL NAND FLASH MEMORY DEVICES



FEATURES

- 100,000 Program / Erase cycles
- 10 Year Data retention
- Open NAND Flash Interface (ONFI) 1.0 compliant

- Densities: 1Gb to 16Gb
- Voltages: 3 V and 1.8 V options
- Industrial temp range (-40°C to 85°C)
- Industrial plus temp range (-40°C to 105°C)

NAND products add reliable, high density data storage to the flash product line. NAND product portfolio includes two standard product families supporting 1bit and 4 bit ECC options. They are available in 1Gb to 16Gb densities.

MPN is formed by a valid combination of the following:

Device Family	S34MS: 1.8V Cypress SLC NAND Flash Memory for Embedded S34ML: Cypress SLC NAND Flash Memory for Embedded
Density	01G = 1 Gb 02G = 2 Gb 04G = 4 Gb
Technology	2 = Cypress NAND Revision 2 (32 nm)
Bus Width	00 = ×8 NAND, single die 04 = ×16 NAND, single die
Package	B = 63-Ball BGA G = 67-Ball BGA T = TSOP
Materials Se	F = Lead (Pb)-free H = Lead (Pb)-free and Low Halogen
Temperature Range	I = Industrial (-40°C to +85°C) A = Industrial with AECQ-100 and GT Grade (-40 °C to +85 °C) V = Industrial Plus (-40°C to +105°C) B = Industrial Plus with AECQ-100 and GT Grade (-40 °C to +105 °C)
Model Number	00 = Standard Interface / ONFI (×8) 00 = Standard Interface (×16) 01 = ONFI (×16)
Packing Type	0 = Tray 3 = 13" Tape and Reel

Mfg. Part No.	Packaging	Memory Size	Supply Voltage	Stock No.	Price Each 1-9+
Parallel					
● S34ML01G200TFI000	TSOP-48	1024Mbit	2.7V-3.6V	55W7286	2.61
● S34ML04G200TFI000	TSOP-48	2048Mbit	2.7V-3.6V	84W9358	5.70
Parallel, 128M x 8bit					
● S34MS01G104BHI010	BGA-63	1Gbit	1.7V-1.95V	84W9362	---
● S34ML01G100BHI000	BGA-63	1Gbit	2.7V-3.6V	45W4082	---
● S34ML01G200BHI000	BGA-63	1Gbit	2.7V-3.6V	55W7284	---
● S34ML01G100TFI000	TSOP-48	1Gbit	2.7V-3.6V	05W4747	---
● S34ML01G100TFI003	TSOP-48	1Gbit	2.7V-3.6V	05W4748	---
● S34ML08G101TFI000	TSOP-48	8Gbit	1.7V-1.95V	96W2395	---
● S34ML08G201TFI000	TSOP-48	8Gbit	1.7V-1.95V	08X5963	---
Parallel, 1G x 8bit					
● S34ML08G101BHI000	BGA-63	8Gbit	2.7V-3.6V	55W7288	---
● S34ML08G101TFI200	TSOP-48	8Gbit	2.7V-3.6V	84W9360	---
Parallel, 256M x 8bit					
● S34ML02G100TFI000	TSOP-48	2048Mbit	2.7V-3.6V	05W4749	---
Parallel, 32M x 16bit					
● S34MS04G204BHI010	BGA-63	4Gbit	1.7V-1.95V	08X5968	---
● S34MS04G204TFI010	TSOP-48	4Gbit	1.7V-1.95V	08X5970	---

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PARALLEL NAND FLASH MEMORY DEVICES (CONT.)

Mfg. Part No.	Packaging	Memory Size	Supply Voltage	Stock No.	Price Each 1-9+
Parallel, 512M x 8bit					
● S34ML04G100BHI000	BGA-63	4Gbit	2.7V-3.6V	45W4084	---
● S34ML04G200BHI000	BGA-63	4Gbit	2.7V-3.6V	84W9357	5.98
● S34ML04G100TFI000	TSOP-48	4096Mbit	2.7V-3.6V	05W4751	---
Parallel, 64M x 16bit					
● S34MS02G104BHI010	BGA-63	2Gbit	1.7V-1.95V	84W9363	---
Parallel, 64M x 8bit					
● S34MS04G100BHI000	BGA-63	4Gbit	1.7V-1.95V	08X5965	---
● S34MS04G200BHI000	BGA-63	4Gbit	1.7V-1.95V	08X5967	---

PIM_211876

NON-VOLATILE MEMORY



life, augmented

Zero Power RAMs (ZPRs) are electronic memory elements to buffer machine data. They are used in order winder controls in order to store offset values, initializing data and operating data.

ZEROPower® NVRAMs combine Low Power SRAMs and Automatic Battery Switchover and Write Protect circuits to implement Non-Volatile RAMs. They can be used just like standard SRAMs, but retain their contents when power is removed.

TIMEKEEPER NVRAMs are like ZEROPower® NVRAMs, but also include Non-Volatile Real-Time Clocks. Automatic Battery Switchover and Write Protect circuits supply continuous power to the Low-Power SRAM and RTC to keep time and retain the memory when power is removed.

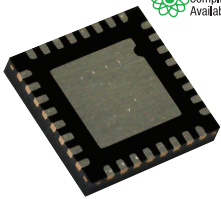
The M48Z02/12 ZEROPower®RAM is a 2 K x 8 non-volatile static RAM which is pin and function compatible with the DS1220. A special 24-pin, 600 mil DIP CAPHAT™ package houses the M48Z02/12 silicon with a long-life lithium button cell to form a highly integrated battery-backed memory solution. The M48Z02/12 button cell has sufficient capacity and storage life to maintain data functionality for an accumulated time period of at least 10 years in the absence of power over commercial operating temperature range.

The M48Z08/18 ZEROPower®RAM is an 8 K x 8 non-volatile static RAM which is pin and function compatible with the DS1225. The monolithic chip provides a highly integrated battery-backed memory solution. The M48Z08/18 is a non-volatile pin and function equivalent to any JEDEC standard 8 K x 8 SRAM. It also easily fits into many ROM, EPROM, and EEPROM sockets, providing the non-volatility of PROMs without any requirement for special write timing or limitations on the number of writes that can be performed.

Mfg. Part No.	Packaging	Memory Size	Access Time	Supply Voltage	Stock No.	Price Each 1-9+
Parallel, 2K x 8bit						
● M48Z02-70PC1	DIP-24	16Kbit	70ns	4.75V-5.5V	89K1473	---
● M48Z12-150PC1	DIP-24	16Kbit	150ns	4.5V-5.5V	89K1475	---
● M48Z02-150PC1	DIP-24	16Kbit	150ns	4.75V-5.5V	89K0828	---
Parallel, 32K x 8bit						
● M48Z35Y-70PC1	DIP-28	256Kbit	70ns	4.5V-5.5V	89K1480	15.51
Parallel, 8K x 8bit						
● M48Z18-100PC1	DIP-28	64Kbit	100ns	4.5V-5.5V	89K1478	---
● M48Z08-100PC1	DIP-28	64Kbit	100ns	4.75V-5.5V	89K1474	---

PIM_83729

ZIGBEE TRANSCEIVERS



Features:

- High Performance RF-CMOS 2.4 GHz Radio Transceiver Targeted for IEEE 802.15.4™, ZigBee®, 6LoWPAN, RF4CE, SP100, WirelessHART™ and ISM Applications
- Industry Leading Link Budget (104 dB)
- Ultra-Low Current Consumption
- Easy to Use Interface
- Special IEEE 802.15.4-2006 Hardware Support
- Industrial and Extend
- ed Temperature Range
- Compliant to IEEE 802.15.4-2006 and IEEE 802.15.4-2003
- Compliant to EN 300 328/440, FCC-CFR-47 Part 15, ARIB STD-T66, RSS-210

Low Power 2.4 GHz Transceivers for ZigBee IEEE 802.15.4, 6LoWPAN, RF4CE, SP100, WirelessHART and ISM Applications

Suffix ZU - Temperature Range Industrial (-40° C to +85° C) Lead-free/Halogen-free

Suffix ZF - Temperature Range Industrial (-40° C to +125° C) Lead-free/Halogen-free

Package Type - 32QFN2, 32 lead 5.0x5.0 mm Body, 0.50 mm Pitch, Quad Flat No-lead Package (QFN) Sawn

Mfg. Part No.	Supply Voltage	Data Rate	Sensitivity	RF / IF Modulation	Stock No.	Price Each 1-9+
QFN-32 Pins, 2.405 GHz to 2.48 GHz						
● AT86RF231-ZF	1.8 V to 3.6 V	2Mbps	-101dBm	O-QPSK	68T4734	---
● AT86RF231-ZFR	1.8 V to 3.6 V	2Mbps	-101dBm	O-QPSK	68T4735	---
● AT86RF231-ZU	1.8 V to 3.6 V	2Mbps	-101dBm	O-QPSK	68T4736	---
● AT86RF231-ZUR	1.8 V to 3.6 V	2Mbps	-101dBm	O-QPSK	72T3087	---
QFN-32 Pins, 2.48 GHz to 2.405 GHz						
● AT86RF232-ZX	1.8 V to 3.6 V	250Kbps	-100dBm	O-QPSK	92T0949	---

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