

HIGH TEMPERATURE ICs



For Harsh Environments

Packages:

- Ceramic SOIC (CS)
- Ceramic DIP (D)
- Plastic SOIC (S)
- Gull Wing (H)
- J Leaded (J)
- Plastic PLCC (PL)
- Plastic DIP Module (PD)
- Leadless SLCC (Y)
- Ceramic Through-Hole (CT)

Temperature:

- Extended Temperature -55° C to +180° C (ET)
- High Temperature -55° C to +200° C (HT)

FLASH

| Density | Max Temp | Org | Part No. | Vcc | Speed | Type |
|---------|----------|-----|-----------------------------|----------|-------|---------------|
| 8/16Gb | +180° C | - | TTZ(8/16)GM08PD (Module) | 2.7-3.6V | - | NAND Parallel |
| 8/16Gb | +180° C | - | TTZ4GM(16/32)PL (Module) | 2.7-3.6V | - | NAND Parallel |
| 4Gb | +180° C | - | TTZ4G08 | 2.7-3.6V | - | NAND Parallel |
| 1Gb | +180° C | - | TTZ251024 (Consult Factory) | 2.7-3.3V | 10MHz | SPI |
| 512Mb | +180° C | - | TTZ25M512CT (Module) | 2.7-3.3V | 10Mhz | SPI |
| 512Mb | +200° C | - | TTZ25512 | 2.7-3.3V | 10Mhz | SPI |
| 256Mb | +200° C | - | TTZ25M256CT (Module) | 2.7-3.3V | 10Mhz | SPI |
| 256Mb | +200° C | - | TTZ25256 | 2.7-3.3V | 10Mhz | SPI |
| 128Mb | +200° C | - | TTZ25M128CT (Module) | 2.7-3.3V | 10Mhz | SPI |
| 128Mb | +200° C | - | TTZ25128 | 2.7-3.3V | 10Mhz | SPI |
| 64Mb | +200° C | - | TTZ2564 | 2.7-3.3V | 10Mhz | SPI |

PARALLEL EEPROM

| Density | Max Temp | Org | Part No. | Vcc | Speed (ns) | Type |
|---------|----------|--------|---------------------|-----|-------------|----------|
| 4Mb | +180° C | 512Kx8 | TTE28M040P (Module) | 5V | 120,150,175 | Parallel |
| 2Mb | +180° C | 256Kx8 | TTE28M020P (Module) | 5V | 120,150,175 | Parallel |
| 1Mb | +180° C | 128Kx8 | TTE28C010 | 5V | 120,150,175 | Parallel |
| 1Mb | +200° C | 128Kx8 | TTE28HT010 | 5V | 150,200,250 | Parallel |

SERIAL EEPROM

| Density | Max Temp | Org | Part No. | Vcc | Speed | Type |
|---------|----------|-----|------------------------------|----------|--------|------|
| 2Mb | +180° C | - | TTE25M2048PD (Module) | 2.7-5.5V | 10MHz | SPI |
| 1Mb | +180° C | - | TTE25M1024PD (Module) | 2.7-5.5V | 10MHz | SPI |
| 1Mb | +180° C | - | TTE25C1024 | 2.7-5.5V | 10MHz | SPI |
| 1Mb | +200° C | - | TTE25C1024 (Consult Factory) | 2.7-5.5V | 10MHz | SPI |
| 512Kb | +200° C | - | TTE25C512 | 2.7-5.5V | 10MHz | SPI |
| 256Kb | +200° C | - | TTE25C256 | 2.7-5.5V | 10MHz | SPI |
| 256Kb | +200° C | - | TTE24C256 | 2.7-5.5V | 400KHz | I2C |
| 64Kb | +200° C | - | TTE25C64 | 2.7-5.5V | 10MHz | SPI |
| 64Kb | +200° C | - | TTE24C64 | 2.7-5.5V | 400KHz | I2C |

Consult factory for additional densities and module configurations

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ASYNCHRONOUS SRAM

| Density | Max Temp | Org | Part No. | Vcc | Speed (ns) | Type |
|---------|----------|---------|--------------|----------|------------|----------|
| 8Mb | +200° C | 512Kx16 | TTS512KX16LV | 2.7-3.6V | 20 | Parallel |
| 8Mb | +200° C | 512Kx16 | TTS512KX16 | 5V | 20 | Parallel |
| 16Mb | +200° C | 1Mx16 | TTS1MX16LV | 2.7-3.6V | 20 | Parallel |
| 16Mb | +200° C | 1Mx16 | TTS1MX16 | 5V | 20 | Parallel |

SWITCH MODE CONTROLLER

| Function | Max Temp | Input Voltage | Part No. | Efficiency |
|-------------------------|----------|---------------|----------|------------|
| CURRENT MODE CONTROLLER | +200° C | 10-120V | TT9110 | HIGH |
| CURRENT MODE CONTROLLER | +180° C | 10-450V | TT9120 | HIGH |

REAL TIME CLOCK

| Function | Max Temp | Interface | Part No. | Vcc | Current | Oscillator |
|--------------------|----------|------------------|------------|-----------|---------|--------------------|
| ALL CALENDAR FUNC. | +180° C | I ² C | TTA365SET | 2.7V-5.5V | .65µA | External 32.768KHz |
| ALL CALENDAR FUNC. | +200° C | I ² C | TTA365CSHT | 2.7V-5.5V | .65µA | External 32.768KHz |

SUPERVISORY CIRCUIT- COMING

SOON CUSTOM SOI Capability

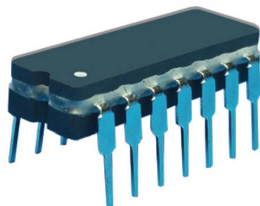
DDR MODULES and DEVICES

TTDDR232M72PBG

- Density: 288MB (includes ECC)
- Org: 32Mx72 Type: DDR2
- Speed: 333MHz Vcc: 1.8V
- + 105° C Max Temp. Operation
- 25mm x 37.5mm 255 Ball PBGA

TTDDR3128M16

- Density: 2Gb
- Org: 128Mx16 Type: DDR3L
- Speed: 933MHz Vcc: 1.35V
- + 105° C Max. Temp. Operation
- 8mm x 14mm 96 Ball FBGA



SWITCH MODE CONTROLLERS

- 9120: 10-450V Input Range
- 9110: 10-120V Input Range
- Current Mode Controller
- High Efficiency
- +200° C Max. Operating Temp
- Plastic and Ceramic SOIC and Ceramic CerDIP Packages

REAL TIME CLOCK

- Provides Year, Month, Day, Weekday, Hours, Minutes and Seconds Based on a 32.768KHz Quartz Crystal
- 1.8v to 5.5v Operation
- Low Backup Current; Typical .65µA
- I²C Bus Interface
- Alarm and Timer Functions
- +200° C Operation
- Ceramic SOIC Package

Consult factory for additional densities and module configurations