

# MICROTECH

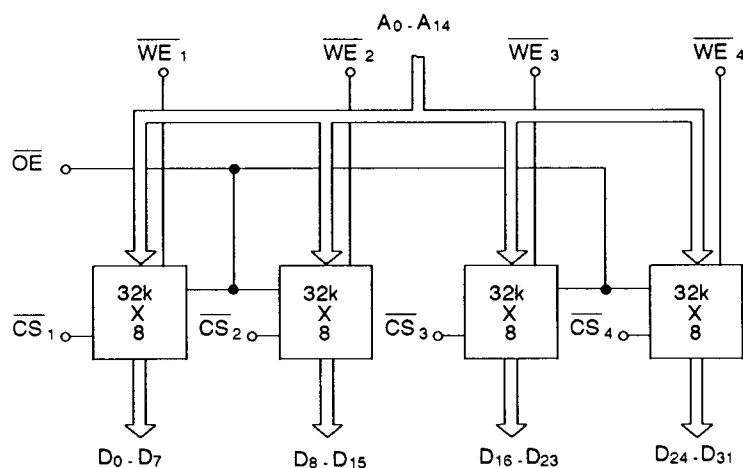
# μT8E128

## μT8 series 128k - Byte E<sup>2</sup> PROM module

### Features

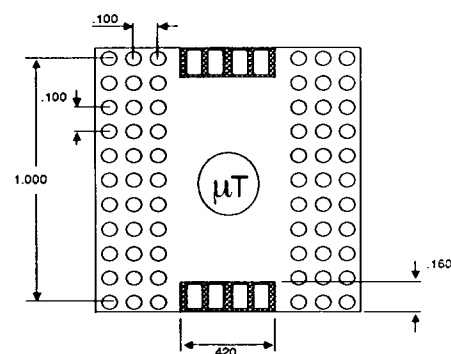
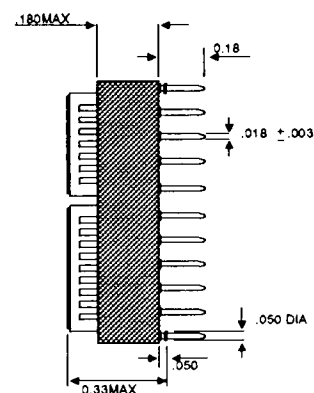
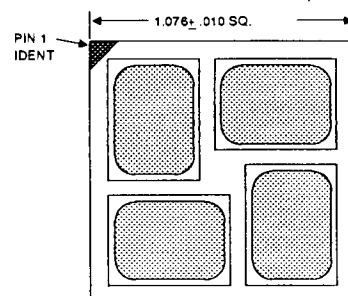
- User selectable path width - 8, 16 or 32 bits
- Single 5V power supply
- Fast access times - 250/300/350ns
- Full military temperature range
- On chip timer - automatic erase before write
- On-board decoupling capacitors
- 10 year data retention
- BS9400 approval pending
- TTL compatible inputs and outputs

### Block Diagram

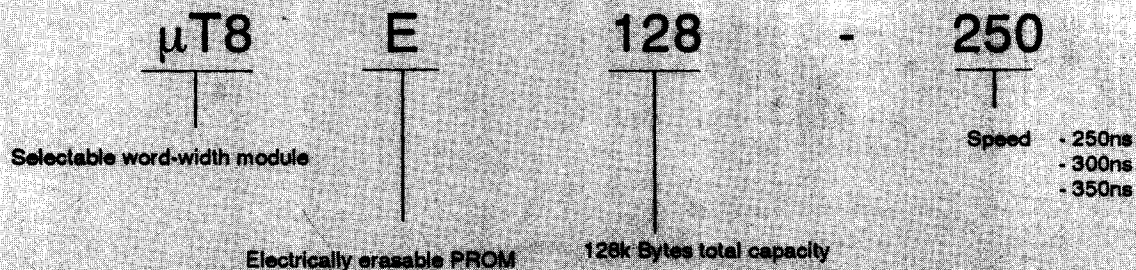


### Package Details

(Dimensions in inches)



### Ordering Information



## Mode Selection

| MODE          | $\overline{CS}$ | $\overline{OE}$      | $\overline{WE}$      | V <sub>CC</sub> | OUTPUTS     |
|---------------|-----------------|----------------------|----------------------|-----------------|-------------|
| Standby       | V <sub>IH</sub> | X                    | X                    | V <sub>CC</sub> | High Z      |
| Write inhibit | X               | X<br>V <sub>IL</sub> | V <sub>IH</sub><br>X | V <sub>CC</sub> | High Z/Dout |
| Read          | V <sub>IL</sub> | V <sub>IL</sub>      | V <sub>IH</sub>      | V <sub>CC</sub> | Dout        |
| Write         | V <sub>IL</sub> | V <sub>IH</sub>      | V <sub>IL</sub>      | V <sub>CC</sub> | Din         |
| Chip erase    | V <sub>IL</sub> | 12V                  | V <sub>IL</sub>      | V <sub>CC</sub> | X           |

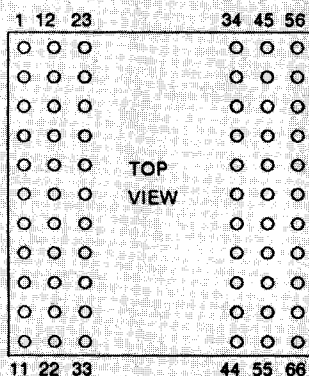
## Read Cycle (Over full temperature range)

(All units in ns)

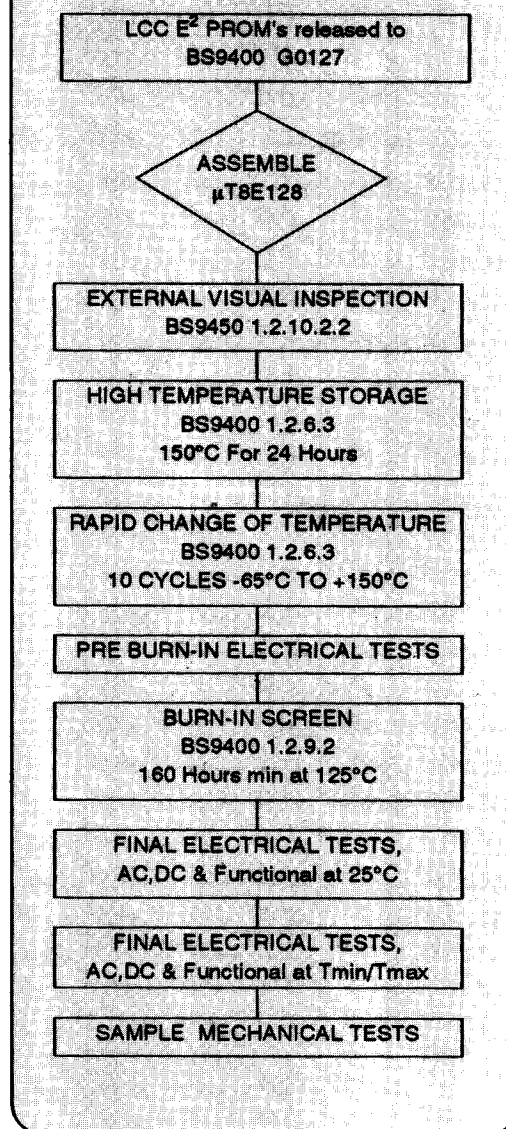
| Item                                        | Symbol           | -250 |      | -300 |      | -350 |      |
|---------------------------------------------|------------------|------|------|------|------|------|------|
|                                             |                  | min. | max. | min. | max. | min. | max. |
| Read Cycle Time                             | t <sub>RC</sub>  | 250  | -    | 300  | -    | 350  | -    |
| Address Access Time                         | t <sub>AA</sub>  | -    | 250  | -    | 300  | -    | 350  |
| Chip Select Access Time                     | t <sub>ACS</sub> | -    | 250  | -    | 300  | -    | 350  |
| Output Enable to Output Valid               | t <sub>OE</sub>  | -    | 90   | -    | 90   | -    | 90   |
| Output Hold from Address Change             | t <sub>OH</sub>  | 0    | -    | 0    | -    | 0    | -    |
| Output or Chip Deselection to Output High Z | t <sub>oF</sub>  | 0    | 60   | 0    | 80   | 0    | 80   |

## Pin Assignments

## Pin Names



|                     |                |
|---------------------|----------------|
| A0-A14              | Address Inputs |
| D0-D31              | Data           |
| $\overline{CS}$ 1-4 | Chip Selects   |
| $\overline{OE}$     | Output Enable  |
| $\overline{WE}$ 1-4 | Write Enables  |
| V <sub>CC</sub>     | Power (+5V)    |
| GND                 | Ground         |

 $\mu$ T8  
MODULE FLOW

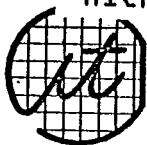
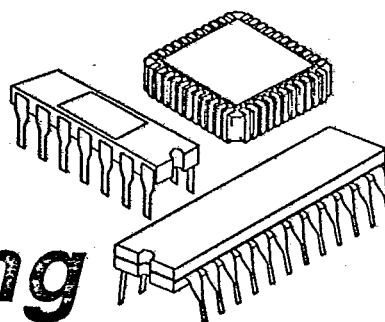
## Power Consumption (Operating average)

|                             |                             |
|-----------------------------|-----------------------------|
| 8 bit data - 66mA maximum   | 32 bit data - 240mA maximum |
| 16 bit data - 125mA maximum | Standby mode - 8mA maximum  |

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## ***Custom Packaging***

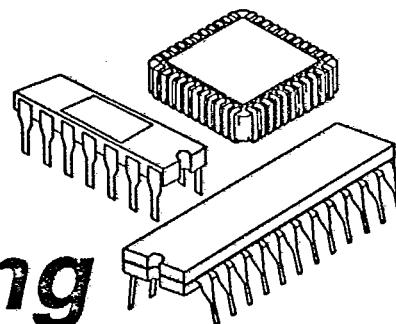
*Microtech Semiconductors are leaders in Custom assembly, with our considerable expertise in production and test, we can satisfy the most complex requirement.*

*We are equipped to assemble virtually any hermetic package style - LCC, JLCC, Quad Pack, PGA & SOT 23 to name but a few. Using proven techniques, such as multichip or multicavity design, our expert engineering, with class 1000 cleanroom assembly and final test, assures quality results.*

*From commercial to space applications Microtech Semiconductors will support your assembly needs.*

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T-90-20



## ***Custom Packaging***

*Approved to CECC and BS9000, hallmarks of European quality, MICROTECH Semiconductors is totally committed to total quality. Dedicated to supporting the high-reliability equipment manufacturer, our integrated circuits are produced in Class 1000 cleanroom conditions. Final optical inspection takes place under better than Class 100 laminar flow and our impressive range of environmental and electrical test equipment ensures that we release high performance components with no compromise on reliability.*

CUSTOM PACKAGING