

## The Embedded I/O Company

# TIP255 2 Mbytes SRAM Memory with Battery Backup

#### **Application Information**

The TIP255 is an IndustryPack® compatible module that offers an easy and reliable way to implement 2 Mbytes of SRAM memory with battery backup. The TIP255 is ideal for holding configuration parameter and data logging applications.



Four 512 Kbit x eight low power SRAM devices are used to provide two banks of 1 Mbyte (16 bit wide) SRAM memory.

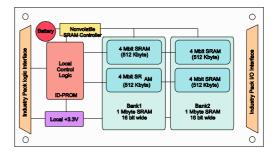
A non-volatile controller together with the on board lithium battery converts the SRAM into non-volatile memory. The battery status can be monitored by the control and status register. Additionally an interrupt can be generated on battery low.

Accesses to the TIP255 SRAM memory occur within the IP memory space. The IP I/O space holds the control and status register and the interrupt vector register.

For First-Time-Buyers the Engineering Documentation TIP255-ED is recommended. The Engineering Documentation includes TIP255-DOC, schematics and data sheets.

#### **Technical Information**

- **O** Interface according to IndustryPack specification
- O Identification-PROM supports auto-configuration
- Single Size IndustryPack
- O 2 Mbytes of SRAM Memory
- O Organized in 2 banks of 1 Mbyte (16 bit wide)
- SRAM chip: 4 devices 512 Kbit x 8, 70ns, TSOP-2 package, low power
- Non-volatile controller converts SRAM into nonvolatile memory
- On board battery holder with lithium battery (type CR2430, 285mAh)
- Automatically switches to battery backup supply when Vcc supply drops
- O Interrupt support on battery low
- O Battery life time 8 years typical @ +25°C
- O Wait states: no wait states
- Power requirements: +5V only, on board +3.3V generation
- Operating temperature -40°C to +85°C (TIP255-10-ET)



### **Order Information**

#### **RoHS Compliant**

TIP255-10R	2 Mbytes SRAM Memory with Battery Backup
TIP255-10R-ET	Same as TPMC255-10R but Extended Temperature Range
None RoHS Compliant	
TIP255-10	None RoHS compliant version of TIP255-10R
TIP255-10-ET	None RoHS compliant version of TIP255-10R-ET
<b>Documentation</b>	
TIP255-DOC	User Manual
TIP255-ED	Engineering Documentation, includes TIP255-DOC

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