

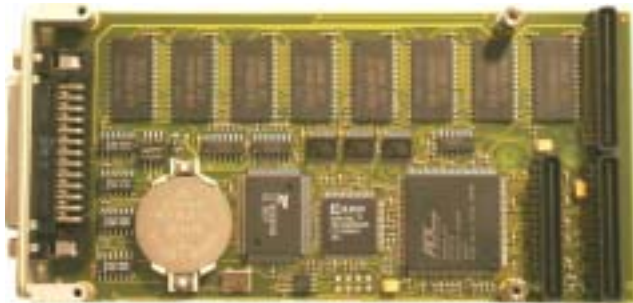
TPMC917 4 Channel Serial Interface RS232 with 4Mbyte SRAM

Application Information

The TPMC917 is a standard single-width 32 bit PMC module providing 4Mbyte SRAM with battery backup by an on board lithium cell for all SRAM devices and four ESD protected RS232 channels.

The 4Mbyte SRAM is organized in two banks, each of them provides 512k x 32 bit memory. During normal operation (standard 5V supply applied to the SRAM's) the capacity of the lithium cell is monitored every 24 hours by the battery monitor device and an interrupt can be generated, if the battery voltage is too low. The monitor device switches the power supply of the SRAM's from the standard 5V to the battery if the 5V supply drops below the threshold level of the battery monitor device. Any active access to the SRAM's at this point is executed correctly within 1.5µs. After this time any further accesses to the SRAM's are not possible. A miniature DIP-switch allows the selection of the battery backup source either from the on board lithium cell or from an external battery via the P14 I/O connector.

The TPMC917-10 provides four RS232 channels. Each channel has a programmable baud rate up to 115.2 kbaud. The 4 channel UART16C654 provides 64byte transmit FIFO and 64byte receive FIFO for each channel to significantly reduce the overhead required to provide data to and get data from the transmitter and receiver. The FIFO trigger levels are programmable. The channels are ESD protected up to +/-15kV according to the human body model and IEC1000-4-2.

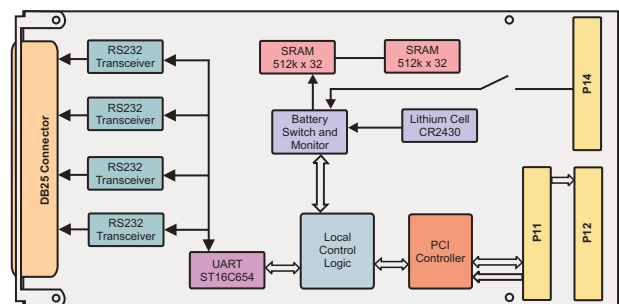


For First Time Users the engineering documentation TPMC917-ED is recommended. The engineering documentation includes TPMC917-DOC, schematics and data sheets.

Driver support (TPMC917-SW-xx) for different operating systems is available.

Technical Information

- Standard single-width 32 bit PMC module conforming to IEEE P1386.1
- PCI 2.1 compliant interface
- Board size: 149mm x 74mm
- 4 channel serial RS232 interface ESD protected
- 4Mbyte SRAM with battery backup by onboard lithium cell
- Battery capacity is monitored every 24 hours
- Interrupt can be generated to control battery voltage
- Programmable baud rates up to 115.2 Kbaud
- 64 byte transmit FIFO per channel, 64 byte receive FIFO per channel



Order Information

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|----------------------|---|
| TPMC917-10 | 4 Channel Serial RS232 |
| TPMC917-DOC | User Documentation |
| TPMC917-ED | Engineering Documentation, includes TPMC917-DOC |
| TA303-10 | Cable Kit for modules with DB25 connector |
| TPMC917-SW-12 | OS-9 Software Support; OS-9 V2.2 (PPC) |
| TPMC917-SW-32 | pSOS Software Support |
| TPMC917-SW-42 | VxWorks Software Support |
| TPMC917-SW-62 | Windows NT 4.0 Software Support |
| TPMC917-SW-65 | Windows XP/2000/98 SE/ME Software Support |
| TPMC917-SW-72 | LynxOS Software Support |
| TPMC917-SW-82 | LiNux Software Support |
| TPMC917-SW-92 | QNX 4 Software Support |
| TPMC917-SW-95 | QNX 6 Software Support |