

With Cover Removed



SATURN Reader PCB
Interface Summary by Reference Designation

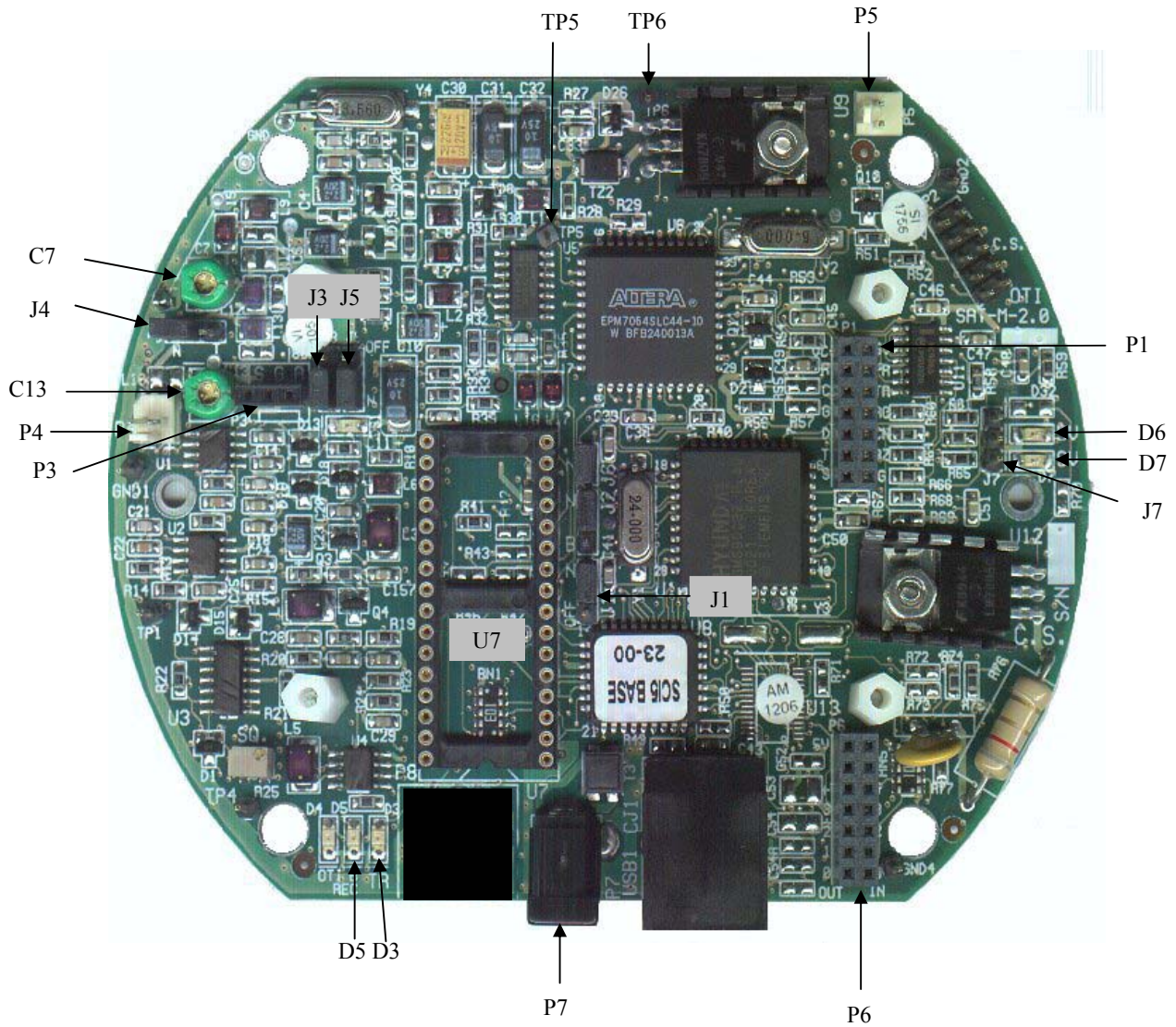


Figure -1: SATURN Reader PCB Layout Front

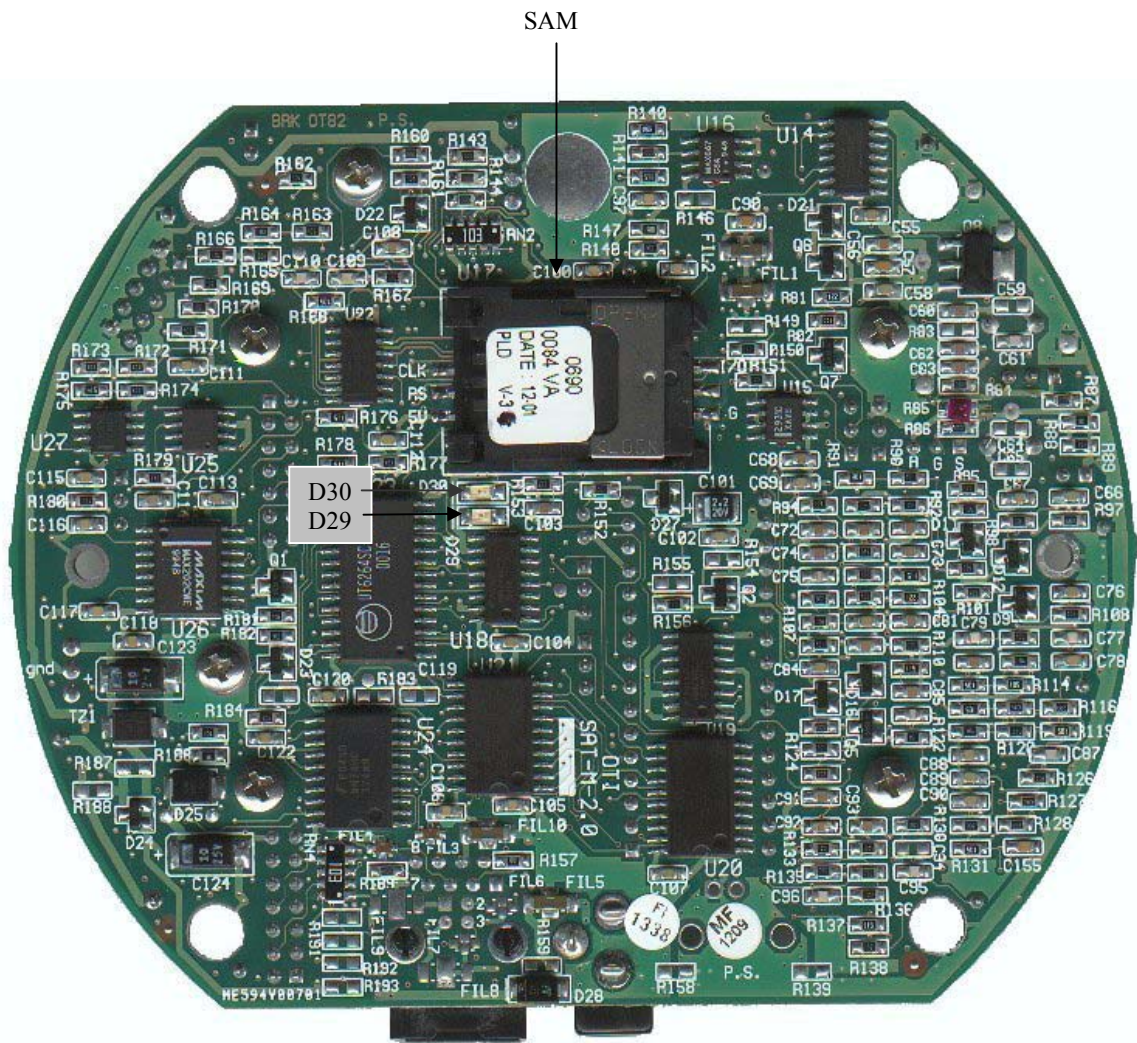


Figure 2: SATURN Reader PCB Layout Back

1.1.1 Connectors

P1 14 pin digital I/O connector to Antenna PCB.

P3 3 pin Antenna connector to Antenna PCB.

P4 2 pin connector for measurement of transmitter voltage.

P5 2 pin connector for measurement of transmitter current.

P6 Optional 14 pin digital I/O connector.

P7 12VDC power input jack connector. (+=Center)

CJ1 RJ45 connector for RS232 serial communication to host.

1.1.2 LEDs

D3 Transmit indicator (green).

D5 Receive indicator (yellow).

D6 +5V (red).

D7 +9V (red)

D29 Transmit indicator (green).

D30 Squelch indicator (yellow).

1.1.3 Jumpers

J1 Transmit selector: (MT/CONT/OFF)

J3 Transmitter modulation selector: (MT/CONT/OFF)

J4 Antenna selector:

Normal Transmission to antenna/50Ω load at transmitter output (maintenance only).

J5 Transmitter carrier selector: (MT/CONT/OFF)

J7 Optional connection to external SAM.

1.1.4 Tuning Capacitors

C7 Transmitter tuning.

C13 Antenna matching variable capacitor VCp

Test Points

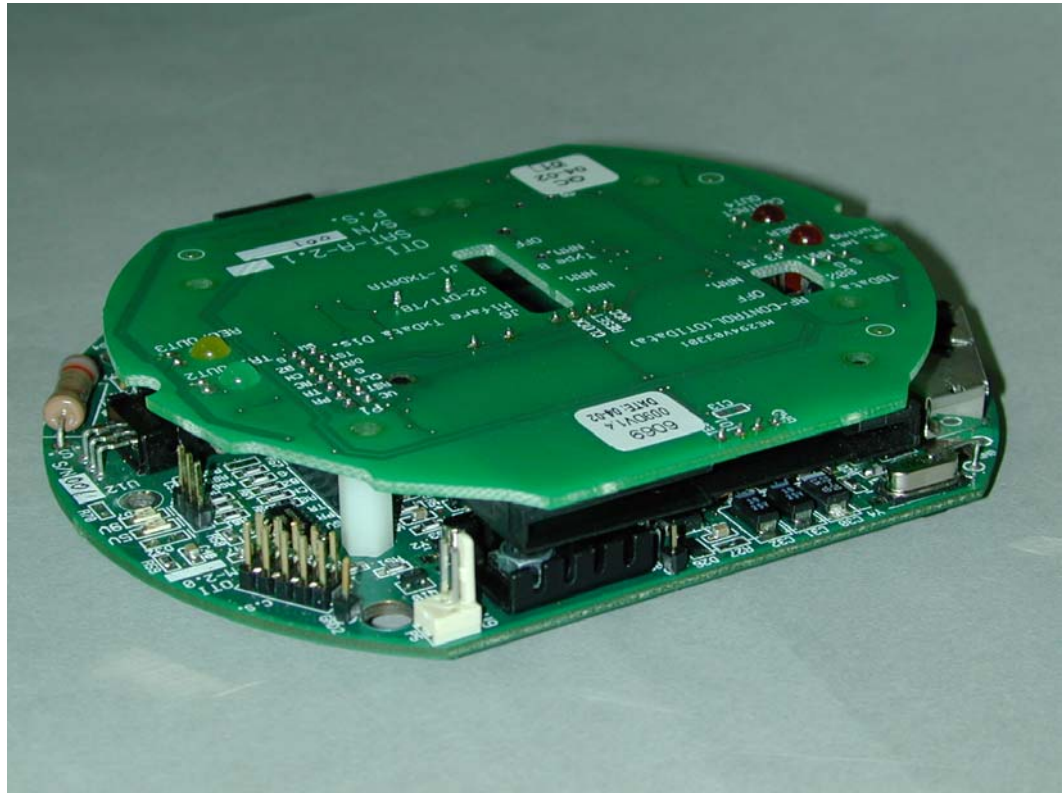
TP5 Squelch measuring point.

TP6 Received data input to μP measuring point.

1.1.5 SAM

SAM Secured Applications Module.

Two PCBs layout



Antenna and LEDs PCB, first side



Antenna and LEDs PCB, second side

