The U-UJB VLSI microcircuit implements the Cardholder algorithm for uplink protection of U.S. Department of Defense (DoD) satellite systems. The component is interoperable with the MYK-16B and KIV-7MS ground units.

### Specifications

- **Data Rate:** 1bps to 20 Mbps
- **Operating Voltage:** 4.5 to 5.5 V DC
- **Power Consumption:** 35 mW/MHz (nominal)
- **Data Interface:** CMOS Levels
- **Format:** NRZ-L and NRZ-M
- **Processing:** DESC-qualified; CMOS Gate Array
- **Testing:** MIL-M-38510/MIL-STD-883
- **Additional Testing:** Group E and DPA Available
- **Temperature Range:** -55 to +125°C
- **Technology:** 0.8-micron Double Level Metal Bulk Gate Array
- **MTTF:** >10M hours per MIL-HDBK-217E
- **Package:** 84-Pin Ceramic Flat Pack
- **Part Number:** ON-TBD

### Pin-for-Pin Compatibility with Caribou and Centurion VLSI

Features of the U-UJB Cardholder VLSI include:

- NSA certification for Type 1 applications
- Command format compatibility with Caribou and Centurion VLSI
- Telemetry format compatibility with Caribou and Centurion VLSI
- Continuous data mode format (128 bits)
- Two command authenticate formats: Ternary and Binary
- Maximum uplink rate of 20 Mbps (117,647 commands per second)

- Built-in self test (BIST)
- Meets QML Class V MIL requirements
- DESC-qualified CMOS gate array manufacturer
- Radiation hardened for space applications 1M Rad (Si)