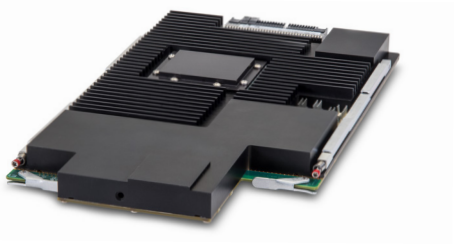
980
Integrated Satellite Router Board



Network Configuration

Compatibility	Evolution® and iDirect Velocity™ compatible		
Network Topology	DVB-S2 Star with Adaptive TDMA Returns		
		Downstream	**Upstream**
		DVB-S2/ACM	A-TDMA
Modulation		QPSK, 8PSK, 16APSK	BPSK, QPSK, 8PSK
FEC		LDPC 1/4-8/9	2D 16-State 1/2-6/7
Maximum Rates	Symbol	45 Msps	15 Msps
	Maximum downstream and upstream data rates cannot be achieved simultaneously. Max rates are achieved under optimal conditions.		
Spread Spectrum	Spreading Factor Max Chip Rate		2, 4 and 8 15 Mcps

Interfaces

SATCOM Interfaces	Tx: MCX, 950-2050 MHz, Composite Power 0 dBm to -30 dBm, 50Ω Rx1: MCX, 950-2150 MHz, -5 dBm (max) composite to -130+10*Log10(Sym rate) dBm (min) single carrier, 50Ω Reference Clock Out: 10/50 MHz, +/-5 ppm, 0 dBm -3/+4 dB power, MCX 50Ω
Data Interfaces	All digital I/O via backplane connector: Amphenol #C-JV602-50015_RevC LAN: Single 10/100/1000 Mbps Ethernet Console: RS-232 BUC Management: RS-422 Variety of discrete interfaces for aeronautical integrations – see integration guide for details
Protocols Supported	TCP, UDP, ICMP, IGMP, RIPv2,Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, OpenAMIP, cRTP
Security	TRANSEC module (E0002268), AES Link Encryption (256-bit)*, X.509 Digital Certificates, Automatic Key Management, SHIELD
Traffic Engineering	Group QoS, QoS (Priority Queuing and CBWFQ), Strict Priority Queuing, Application Based QoS, Minimum CIR, CIR (Static and Dynamic), Rate Limiting
Other Features	Built-in Automatic Uplink Power, Frequency and Timing Control, Authentication, Ultra High-Speed COTM

Mechanical/ Environmental

Size	12.06 in x 6.95 in x 1.06 in (30.63 cm x 17.65 cm x 2.69 cm)
Weight	3.00 lbs maximum (1.36 kg)
Temperature	Operational -40° to +158°F (-40° to +70° C) with adequate airflow and thermal integration Refer to integration guide for thermal design guidelines.
Relative Humidity	Max 95% non-condensing humidity (operational)
Altitude	Up to 55,000 ft (16,764m) Not designed for simultaneous maximum temperature at maximum altitude. Refer to integration guide for thermal design guidelines.
Input Voltage	15–32 VDC
Power Consumption	35 Watts Maximum
Certifications	WGS Certification Pending FIPS 140-2 Level 3 (#3056) - TRANSEC Module
Compliance	Designed to meet MIL-STD 810G and RCTA/DO-160G RoHS

Unless otherwise specified, the information given above is for the Evolution platform and is software dependent. The activation of some features may require a license or subscription. Integrators are responsible for certifications at the terminal level. For more information, please contact your sales representative.
**Applies to iDirect Velocity only and is software dependent*