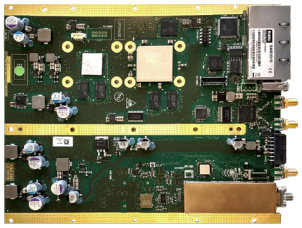
SMB3310 Board Satellite Modem

ST Engineering



The Dialog modem series consist of two-way, high throughput DVB-S2X modems that meets any application across a broad array of markets. The modems share a wide range of key features and can be easily mixed in a single satellite network on the multi-service Dialog platform. The series is extremely flexible as it can leverage Dialog's three return waveform technologies: MF-TDMA, high-rate SCPC and Mx-DMA which seamlessly combines MF-TDMA flexibility with on-demand variable bandwidth allocation of SCPC while guaranteeing the highest efficiency and availability. This series also supports wideband operations up to 500 Msps in the forward channel, enabling service providers to set-up almost any type and size of network on any available type of satellite.

The SMB3310 Satellite Modem Board is suitable for integration into highly compact COTM terminals for the government and defense, broadcast and mobility markets. It offers unprecedented performance in a modem board, supports a broad array of mobility capabilities and is fully equipped to operate on HTS spot beams satellites.

The SMB3310 is also available in a desktop form factor, the MDM3310.

Markets

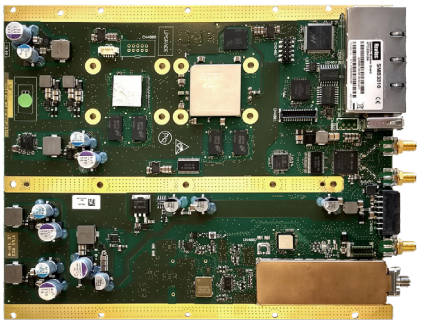
- Mobility
- Enterprise
- Cellular backhaul
- Maritime
- Government

Main Features:

- DVB-S2 (up to 45Msps) / DVB-S2X (up to 500 Msps) outbound
- Supports DVB-S2X MODCODS up to 64APSK
- Return max rates up to 40 Msps (SCPC), 20 Msps (Mx-DMA)
- Ideal for both fixed and mobility applications with throughput rates up to 100/25 Mbps
- OpenAMIP and GXT file support for mobility
- Security features with Optional AES128 scrambling
- Embedded TCP acceleration, GTP acceleration and header compression

DIALOG

powered by Newtec iDirect



Network Configuration

Network Topology	Rx	Tx		
	DVB-S2/DVB-S2X	MF-TDMA	Mx-DMA	SCPC
Modulation	QPSK, 8PSK, 16APSK, 32APSK, 64APSK	4CPM	QPSK, 8PSK 16APSK, 32APSK	QPSK, 8PSK, 16APSK, 32APSK, 64APSK
Symbol Rates	1 Msps to 500 Msps	Up to 7.6 Msps	32 ksps to 20 Msps	1 Msps to 64 Msps

Modem Interfaces

Tx Interface

Connector	SMA 50 Ohm
Frequency range	950-2400 MHz
TX level	-55 dBm to +5 dBm
BUC power supply	24VDC, 3.8A
BUC reference	10 MHz
BUC reference level	3 dBm

Rx Interface

Connector	SMA 50 Ohm
Frequency	950-2150 MHz
LNB power supply	13/18VDC 500mA
LNB band selection	13/18V or 22kHz tone, programmable
LNB polarization selection	13/18 or 22 kHz tone, programmable

Data Interface

LAN: Four 10/100/1000 Mbps Ethernet, auto MDI/MDIX

Management Interface

RJ45 console port

Development Kit

- CAD drawings
- Thermal design guidelines
- Mechanical design guidelines
- Electrical interface specification
- API description

Management

Protocols Supported

UDP, IPv4&IPv6, ICMP, TCP, IGMPv1, IGMPv2, ARP, DHCP, DNS, NTP, BGP, NAT, Diffserv Marking

Multilingual Web GUI

Manage web GUI via configurable management IP address

Mechanical and Environmental

Housing		W 18.29 cm x D 23.62cm x H 2.18 cm (W 7.2 in x D 9.3 in x H 0.86 in)
Weight		0.4 kg (0.88 lbs)
Temperature:		
	Operating	-25° to +55°C (-13° to +131°F) (subject to adequate heatsinking)
	Storage	-40° to +60°C (-40° to +140°F)
Humidity:		
	Operating	5 - 95% non-condensing

Power Supply

Input Voltage	24 VDC
Power Consumption	<30W