

The module of the DVB-S / DVB-S2 receiver

The module is designed to convert the signal of a satellite IF modulated in accordance with the DVB-S2 or DVB-S standard to a parallel DVB transport stream. The module can be used to build various converters, transmodulators and other digital broadcasting equipment. The receiver's transport stream serves as an input signal for the DVB-S / -S2 / -C / -T - / -T2 modulator modules, DVB TS-to-ASI converters, DVB TS-to-IP and other formats compatible. The module is controlled, monitored and adjusted via the PC via the RS232 interface, directly or via the TCP / IP control module.

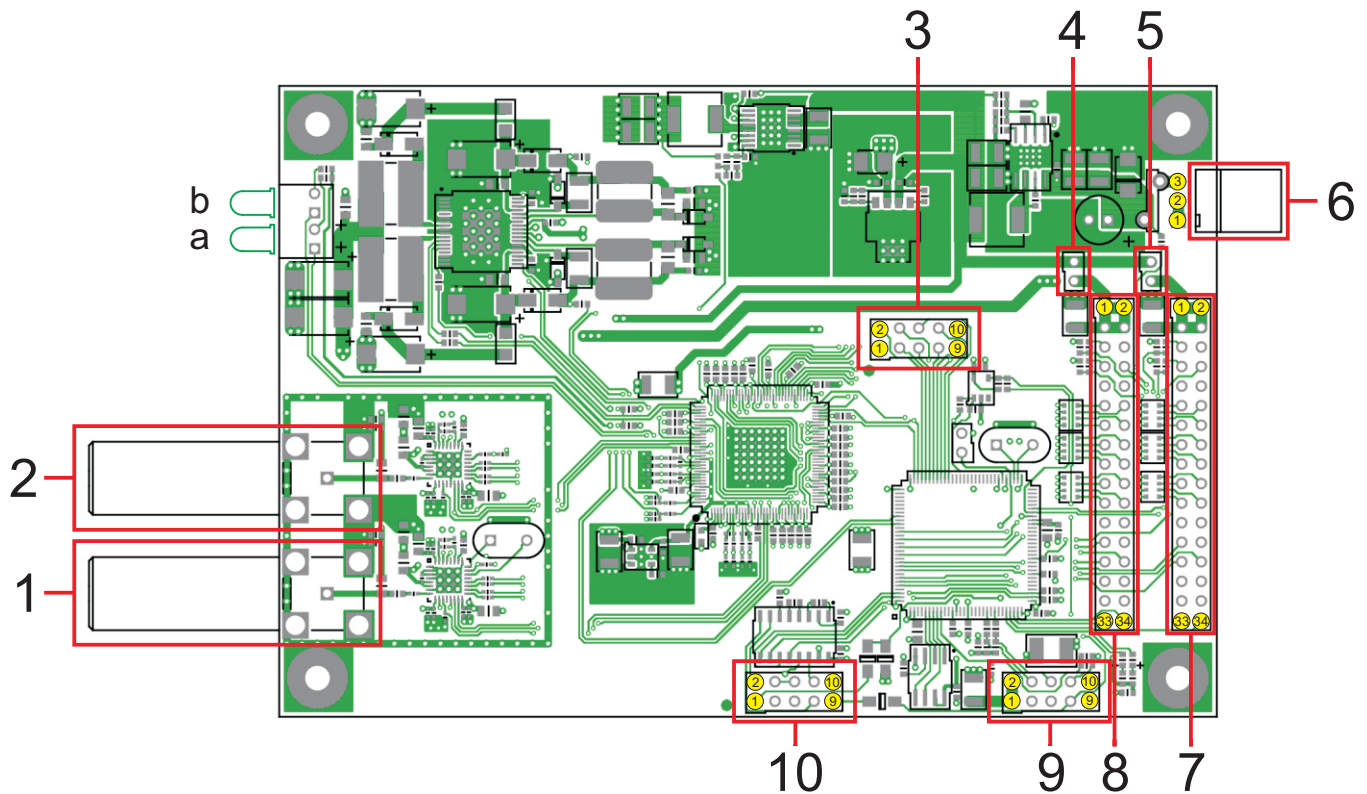
The main advantages of the module are support for all types of modulation of the satellite signal, small size and power consumption, which provides greater flexibility of use.

Main technical characteristics

Modulation type	DVB-S2, DVB-S
Modulation parameters:	
DVB-S2 mode:	
Constellation	QPSK, 8PSK, 16APSK*, 32APSK*
FEC	1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
Symbolrate	1...36 MSym/s in 1 kSym/s-steps
Roll-Off-Factor	0.2, 0.25, 0.35
DVB-S mode:	
Constellation	QPSK
FEC	?, 2/3, 3/4, 5/6, 7/8
Symbolrate	1...65 MSym/s in 1 kSym/s-steps
Frequency range at the RF input	950...2150 Mhz, in 1 kHz-steps
Type of input connector	F
Input impedance	75 Ohm
Output signal	parallel DVB transport stream
Output connector type	PLD-34
Management Interfaces	TCP/IP, Rs232
Supply voltage	8...18 VDC
Consumed power, no more than	10 W
Overall dimensions of the receiver board	120x80 mm

*these modes are available only in the single-channel version of the receiver

Module Connectors



- 1 - F - Input of the 1st channel of the receiver
- 2 - F - Input of the 2nd channel of the receiver
- 3 - PLD-10 - Reserved
- 4 - Jumper for power supply (+ 5.0 V) to the conjugate module via the transport stream connector 2
- 5 - Jumper for power supply (+ 5.0 V) to the conjugate module via the transport stream connector 1
- 6 - Power supply module (8 ... 18 VDC, 10 W)
- 7 - PLD-34 - Transport stream output 1
- 8 - PLD-34 - Transport stream output 2
- 9 - PLD-10 - Reserved
- 10 - PLD-10 - Management module, RS-232 (115200, 8N1), connection control module

- a - LED "Lock 1st channel" (green)
- b - LED "Lock 2nd channel" (green)

Pin Assignment

Jumper 4 - power for the conjugated module

Closed - supply (+ 5.0V) is supplied to the transport stream connector 2
 Open - power (+ 5.0 V) is not supplied

Jumper 5 - power for the conjugated module

Closed - supply (+ 5.0V) is supplied to the transport stream connector 1
 Open - power (+ 5.0 V) is not supplied

Connector 6 - module power supply

- | | |
|---|------------------|
| 1 | GND |
| 2 | GND |
| 3 | 8...18 VDC, 10 W |

Connector 7, 8 -transport stream output

1	+ 5,0 V	2	+ 5,0 V
3	+ 5,0 V	4	+ 5,0 V
5	SDA	6	Not connected
7	SCL	8	xReset
9	GND	10	GND
11	TSCLK	12	PSYNC
13	Not connected	14	DVAL
15	TSDATA 6	16	TSDATA 7
17	TSDATA 4	18	TSDATA 5
19	TSDATA 2	20	TSDATA 3
21	TSDATA 0	22	TSDATA 1
23	GND	24	GND
25	MISO	26	Not connected
27	SCK	28	MOSI
29	GND	30	GND
31	Not connected	32	Not connected
33	Not connected	34	GPIO

Connector 10 - module management, RS-232

1	Mode	2	TxD
3	RxD	4	Con. with 6
5	GND	6	Con. with 4
7	Rx CPU	8	Tx CPU
9	Reset	10	GND