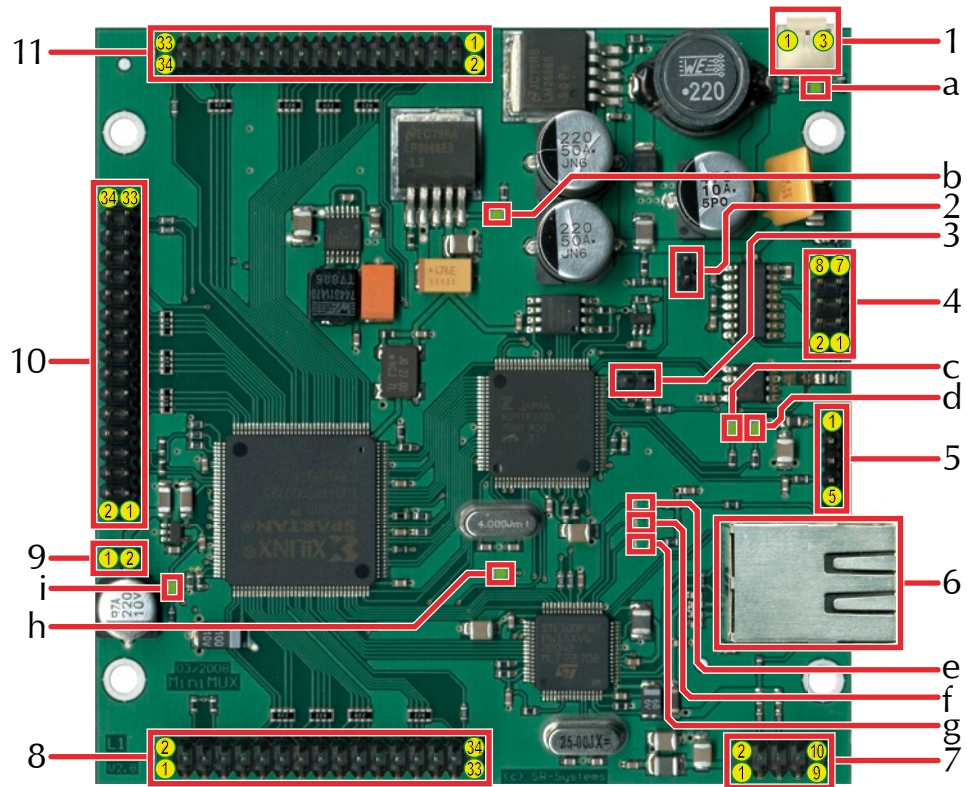


1 Connector description



Board dimensions: 100×100 mm

Connectors	1	Power Input	9–24 V=
	2	2pin Header	Slave mode (bridged=on)
	3	2pin Header	MCU Prog. (bridged=on)
	4	10pin Header	RS232
	5	5pin Header	optional
	6	RJ45	Ethernet 10/100 MBit
	7	10pin Header	I ² C (for Display- and key unit)
	8	34pin Header	TS _{in} 1
	9	2pin Header	5,0 V for TS _{out} (for use with ASI-out board)
	10	34pin Header	TS _{out}
	11	34pin Header	TS _{in} 2
LEDs	a	SMD-LED green	+5,0 V ok
	b	SMD-LED green	+3,3 V ok
	c	SMD-LED green	FPGA loaded
	d	SMD-LED green	Encoder loaded
	e	SMD-LED green	not used (reserverd for ethernet purposes)
	f	SMD-LED green	not used (reserverd for ethernet purposes)
	g	SMD-LED green	not used (reserverd for ethernet purposes)
	h	SMD-LED green	FPGA running
	i	SMD-LED green	+2,5 V ok

2 Pin description

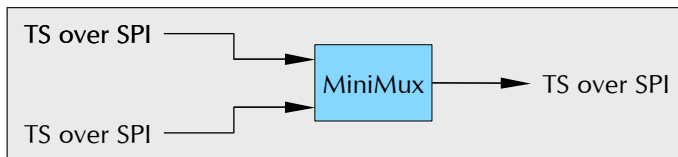
1 – Power input			
1	V _{IN} 9–24 V=		
2	GND		
3	GND		
2 – Slave mode			
closed	Slave mode on		
3 – MCU Prog. mode			
closed	MCU Prog. mode on		
4 – RS232			
1	ext. mode	2	Control TxD
3	Control RxD	4	Data Rx
5	GND	6	Data Tx
7	con. with 8	8	con. with 7
9	Reset	10	GND
5 – Optional			
1	+3,3 V/500 mA		
2	Optional 2		
3	Optional 1 (DCF77 in)		
4	Analog input (0-3,3 V)		
5	GND		
7 – I ² C-Bus			
1	+5,0 V	2	+5,0 V
3	SDA	4	SDA
5	SCL	6	SCL
7	Reset-In	8	IRQ
9	GND	10	GND
8, 11 – TS _{IN1} , TS _{IN2}			
1	+5,0 V	2	+5,0 V
3	+5,0 V	4	+5,0 V
5	SDA	6	optional use
7	SCL	8	xReset
9	GND	10	GND
11	TSCLK	12	PSYM
13	TSERR	14	DVAL
15	TS D6	16	TS D7
17	TS D4	18	TS D5
19	TS D2	20	TS D3
21	TS D0	22	TS D1
23	GND	24	GND
25	SD Out (f. E.*)	26	PLL THR (f. E.*)
27	SDCLK (f. E.*)	28	SD In (f. E.*)
29	GND	30	GND
31	MCLK 27 MHz	32	ASCLK (f. E.*)
33	RST Vid. Codec	34	optional use
*f. E. = for Encoders			
9 – Power mode			
closed	+5,0 V on for TS _{OUT}		
open	+5,0 V off for TS _{OUT}		
10 – TS _{OUT}			
1	+5,0 V*	2	+5,0 V*
3	+5,0 V*	4	+5,0 V*
5	SDA	6	optional use
7	SCL	8	xReset
9	GND	10	GND
11	TSCLK	12	PSYM
13	TSERR	14	DVAL
15	TS D6	16	TS D7
17	TS D4	18	TS D5
19	TS D2	20	TS D3
21	TS D0	22	TS D1
23	GND	24	GND
25	SD Out	26	PLL THR
27	SDCLK	28	SD In
29	GND	30	GND
31	MCLK 27 MHz	32	ASCLK
33	RST Vid. Codec	34	optional use
*depends on Power mode jumper (9)			

3 Specifications

Board dimensions	100×100 mm
Board weight	<50 g
Voltage	9–24 V=
Power consumption	~3 W
TS Input	int./ext. clock mode up to 100 MBit
RF Frequency	int./ext. clock mode up to 100 MBit

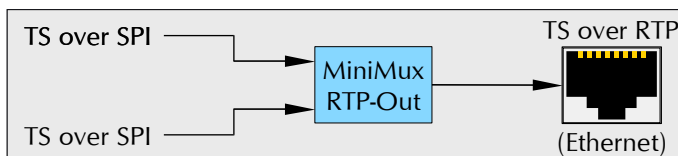
4 Applications

4.1 2TS DVB Mux



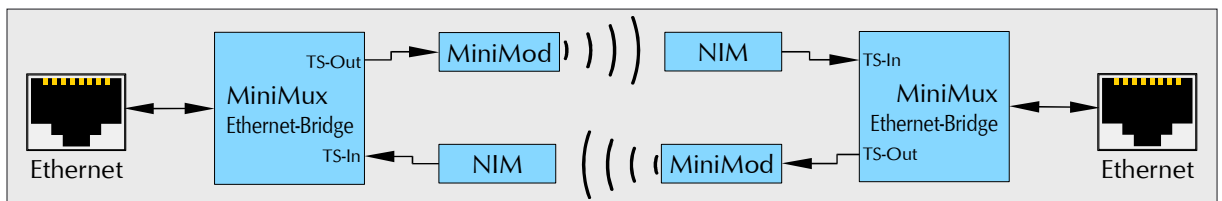
Ethernet is not populated, an upgrade to other versions of the MiniMux is not possible!

4.2 IP RTP-Streamer (DVB over IP)



Same as normal 2TS DVB Mux, but output is RTP (Ethernet). RTP streaming supports only MPTS as broadcast, multicast and unicast destinations.

4.3 Ethernet-Bridge (Ethernet over DVB)



Unless only broadcast packets are sent, Ethernet bridging requires a full bidirectional link.

Errata/corrections:

19.06.2008 Release V1.0

20.07.2009 Chapter „Applications“ added