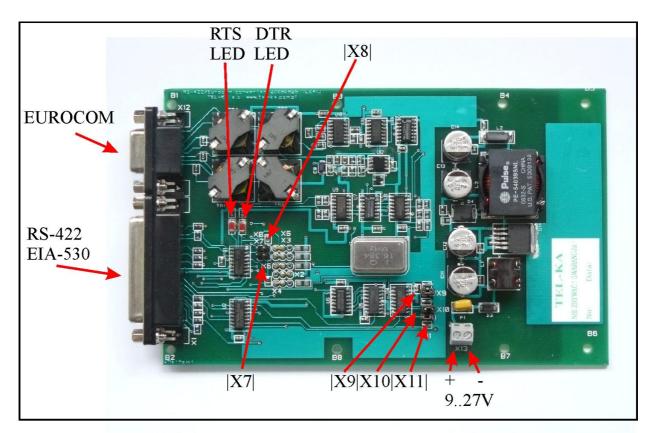
#### 1. General Information

Eurocom/EIA-530 converter board allows to connect any equipment with Eurocom interface to any equipment with RS-422/EIA-530 interface.

RS-422/EUROCOM converter board specification.

- 1. Throughput: 256..2048 kbps
- 2. RS-422 interface:
  - o RS-422/V.11/X.27 electrical parameters
  - o D-SUB 25 female-type connector
  - o DCE (modem) interface according EIA-530 standard
- 3. Eurocom interface
  - o B type, as per EUROCOM D/1 1986 IB6 (pages IB6-1 .. IB6-5)
  - o interface: D-SUB 9 female-type
- 4. Power supply: DC +9V..+30, non-isolated, '-' connected to board's earth and GND line of RS-422 interface
- 5. Board size: 100x160mm

## 2. Board layout



# 3. Connectors layout

# 1. Interface EIA-530 connector DSUB-25, female

No	Pin	Code	Cat	Direction	Name (V.24 ITU circuit)	Type in DCE	U
1	1	Shield			Connected in DTE, not connected in DCE		
2	A 2 B 14	BA TxD	I	to DCE	TXD, Transmit Data (103)	Receiver	*
3	A 3 B 16	BB <b>RxD</b>	I	from DCE	RXD, Receive Data (104)	Transmitter	*
4	A 4 B 19	CA/CJ RTS	I	to DCE	Request To Send (105)/ Ready For Receiving	Receiver	*
5	A 5 B 13	CB CTS	I	from DCE	Clear to Send (106)	Transmitter <sup>1</sup>	*
6	A 6 B 22	CC DSR	I	from DCE	DCE ready DSR(107) Data Set Ready	Transmitter <sup>2</sup>	*
7	7	AB GND			GND (102)		*
8	A 8 B 10	CF <b>RLSD</b>	I	from DCE	Received Line Signal Detector (109)	Transmitter	*
9	A 17 B 9	DD <b>RxClk</b>	I	from DCE	Receive Signal Timing (115)	Transmitter	*
10	A 24 B 11	DA iTxClk	I	to DCE	Transmit Signal Timing (113)	Receiver	*
11	A 15 B 12	l	I	from DCE	Transmit Signal Timing (114)	Transmitter	*
12	A 18	LL	II	from DCE	Local Loopback (141)	Receiver V.10	
13	A 20 B 23	CD <b>DTR</b>	I	from DCE	DTE Ready (108) Data Terminal Ready	Receiver	*
14	A 21	RL	II	from DCE	Remote Lopback (142)	Receiver V.10	
16	A 25	TM	II	from DCE	Test Mode	Receiver V.10	

<sup>\* -</sup> used in Eurocom/RS-422 converter

 $Category \ (Cat.): \hspace{5mm} I-I \ V.11 \ / \ RS-422$ 

II - V.10 / RS-423

Transmitter<sup>1</sup>: CTS is connected directly to RTS Transmitter<sup>2</sup>: DSR is connected directly to DTR

### 2. Eurocom interface B, DSUB-9 female

No	Pin	Name / Eurocom B	Direction	RL-432 19pin Mux connector
1	1	Transmit Clock A		L
2	6	Transmit Clock B	Output from converter	M
3	2	Transmit Data A		Н
4	7	Transmit Data B		G
5	3	Receive Clock A		K
6	8	Receive Clock B	Input to converter	J
7	4	Receive Data A		F
8	9	Receive Data B		Е
9	5	GND		

#### 3. Power connector

Converter board is powered by +9..+30VDC. The equipment is resistant to incorrect power connection, if the voltage is below 35V.

## 4. Configuration

## 1. Clock configuration

jumper			Transmit Signal Timing	Eurocom transmit clock	
X11	X10	X9	(114) EIA-530 DB		
short	short	short	Internal source 256 kHz	Internal source 256 kHz	
short	short	open	Internal source 512 kHz	Internal source 512 kHz	
short	open	short	Internal source 1024 kHz	Internal source 1024 kHz	
short	open	open	Internal source 2048 kHz	Internal source 2048 kHz	
open	short	short	Off	Derived from EIA-530, DA, Transmit Signal Timing (113)	
open	short	open	Derived from Eurocom, Receive Clock	Derived from Eurocom, Receive Clock	
open	open	any	Off	Off	

### 2. RTS-CTS configuration

X7 jumper	RTS - CTS load
short	resistive 100Ω
open	without load

#### 3. DTR-DSR configuration

X8 jumper	DTR - DSR load
short	resistive $100\Omega$
open	without load

# 5. Signaling

- 1. **RTS LED** reflects the state of *Request To Send* (105 V.24 ITU) interface circuit.
- 2. **DTR LED** reflects the state of *Data Terminal ready* (108 V.24 ITU) interface circuit.