Combo3

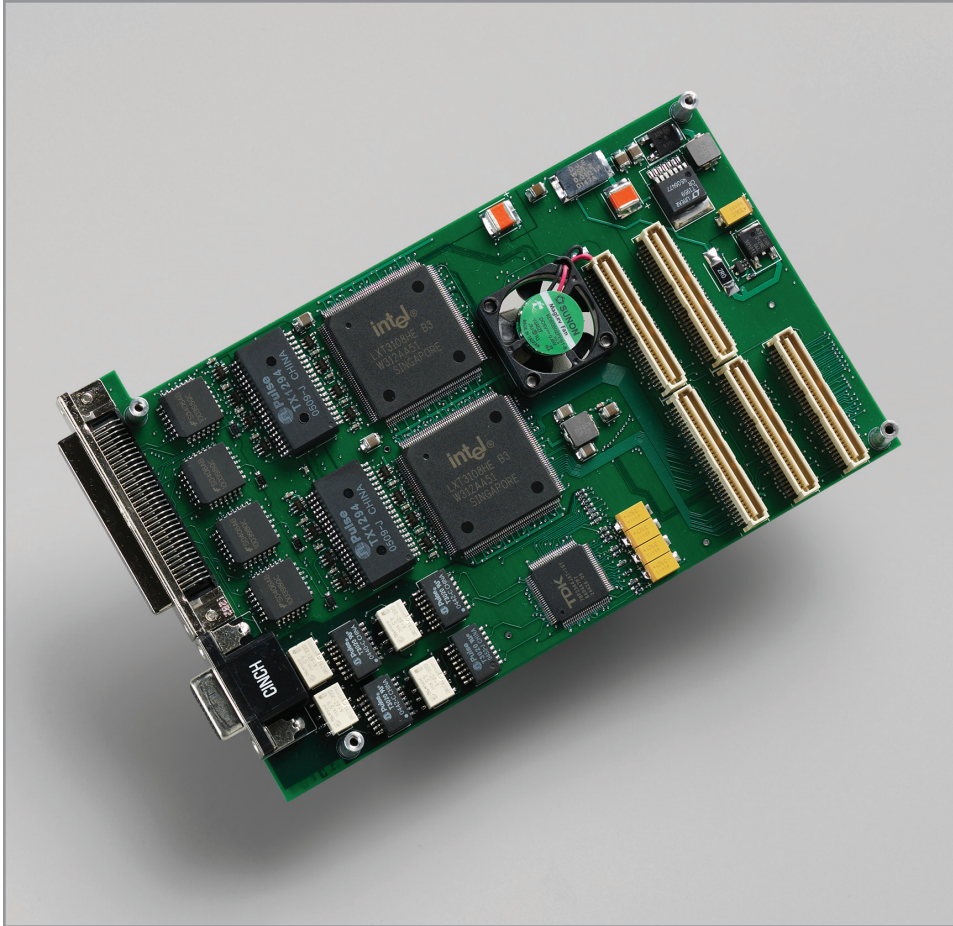## Interface for E1 (T1) and E3 (T3), with optional ECL, LVDS, or RS422

Description

The Combo 3 is a mezzanine board that pairs with a PCI / PCIe main board to provide two ports (0 and 1) for E1/T1, E3/T3, ECL, LVDS, and RS422 in two main configurations.

In the standard configuration, port 0 provides sixteen interfaces for E1/T1, while port 1 provides four interfaces for E3 / T3. The optional configuration provides eight synchronous serial interfaces for ECL, LVDS, or RS422 (in groups of two); each interface has one clock signal and one data signal, for a total of sixteen signals (in groups of four).

The I/O is electronically selected rather than jumpered.

EDT provides FPGA configuration files to support raw, framed, framed and descrambled, header, or payload data. Custom configuration files can be requested.

The main board supplies DMA, plus additional memory and programmable FPGA resources.

Features

Mezzanine board – pairs with an EDT main board (PCI or PCIe), which adds DMA, programmable FPGA resources, and memory

I/O: Electronically selected, not jumpered
- Standard = E1/T1 (sixteen I/O interfaces) and E3/T3 (four I/O interfaces)
- Optional = ECL / LVDS / RS422 (eight synchronous serial pairs, each with one clock signal and one data signal, for a total of sixteen signals in groups of four)

Applications

Signal receiver and transmitter

Communications monitoring (serial data)

Satellite ground station support

Specifications

Product Type	Interface for E1 (T1) and E3 (T3), with optional LVDS, RS422, or ECL; it requires an EDT PCI / PCIe main board.		
FPGAs and Memory	Programmable FPGA and memory resources are provided by the main board.		
Data Rates	Dependent on such factors as data format, main board, and system variables.		
Data Format (I/O)	Two standard formats (E1/T1 and E3/T3) and one optional format (ECL, LVDS, or RS422) are available, as shown below.		

	Standard (E1/T1 and E3/T3 both are included):	**E1/T1**	**E3/T3**
	Interfaces	16	4
	Transformer coupled	Yes	Yes
	Compliance	G.703, T1.102	G.703, T1.102
	Mb/s	2.048 / 1.544	Up to 51.84 (with 75-ohm coaxial cable over 1100 ft.)
	Coding	HDB3 / B8ZS	HDB3 / B3ZS
	Jitter attenuation	Yes	Yes

	Optional (select ECL, LVDS, or RS422 if desired):	**ECL**	**LVDS**	**RS422**
	Termination (differential)	50 ohms to -2 V DC	100 ohms	100 ohms
	Interfaces: Eight bidirectional (ECL, LVDS, or RS422), in groups of two, with one clock signal and one data signal per interface.			
	Signals: Sixteen, in groups of four.			

Connectors	Port 0:	One 15-pin D
	Port 1:	One 68-pin AMP
Cabling	Consult EDT for purchase options.	
Physical	Weight	3.8 oz. typical
	Dimensions	6.6 x 4.2 x 0.75 in. (with a main board)
Environmental	Temperature (operating / non-operating)	0° to 40° C / -40° to 70° C
	Humidity (operating / non-operating)	1% to 90%, non-condensing at 40° C / 95%, non-condensing at 45° C
System and Software	For details on system requirements and EDT-provided software driver packages, see specifications for your EDT main board.	

Ordering Options

- Main board: PCI SS / GS or PCIe8 LX / FX / SX
- I/O (optional): ECL / LVDS / RS422

For more options, see main board detail.
Ask about custom options.

International Distributors

Sky Blue Microsystems GmbH
Geisenhausenerstr. 18
81379 Munich, Germany
+49 89 780 2970, info@skyblue.de
www.skyblue.de

ZERIF
TECHNOLOGIES LTD.
A SKY BLUE COMPANY, FOUNDED 1999

In Great Britain:
Zerif Technologies Ltd.
Winnington House, 2 Woodberry Grove
Finchley, London N12 0DR
+44 115 855 7883, info@zerif.co.uk
www.zerif.co.uk