High Density LVDS-NIM Converter

Applications:

- high density signal conversion from LVDS to NIM level, 672 individual LVDS to NIM channels available per 6U (6HE) VME bin
- directly available in VMEbus main frame together with data processing equipment
- suited for various data processing electronics with industry standard LVDS signals such as e.g. ELB-VME-VFB6 (with extension cards)

Highlights:

- +5V, 2A single rail power supply from the VMEbus back plane
- modified edition with linear instead of switching regulator available
- >200 MHz*) signal transmission bandwidth
- no programming, no data access required

Compatible Products

ELB-VME-VFB6:

- VMEbus board with Xilinx Spartan 6 FPGA (LX45, LX75, LX100 or LX150)
- equipped with **ELB-MEZ-NIO** 8 channel NIM I/O extension (3 * 8 = 24 NIM input channels per ELB-VME-VFB6 board possible) with signaling rate of 100 MHz*)

ELB-NIM-N2L-01:

- 32 channel NIM-LVDS converter
- NIM bin form factor 5U (5HE)
- 500 MHz*) signal transmission bandwidth

*) value assured by design, not tested in production

Contact

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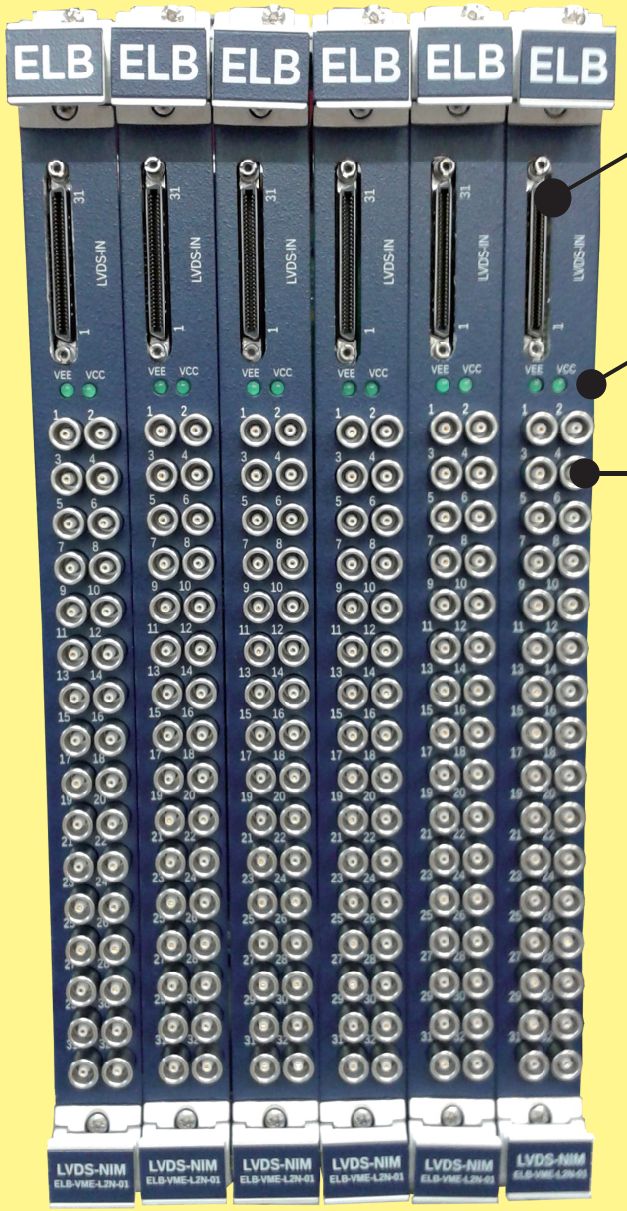
Flyer Version 1.1

32 Channel LVDS-NIM Converter

ELB-VME-L2N-01

(6 modules shown)

Module Details (ELB-VME-L2N-01)



(6 modules shown)

Input:

- VHDCI connector for 32 LVDS signals

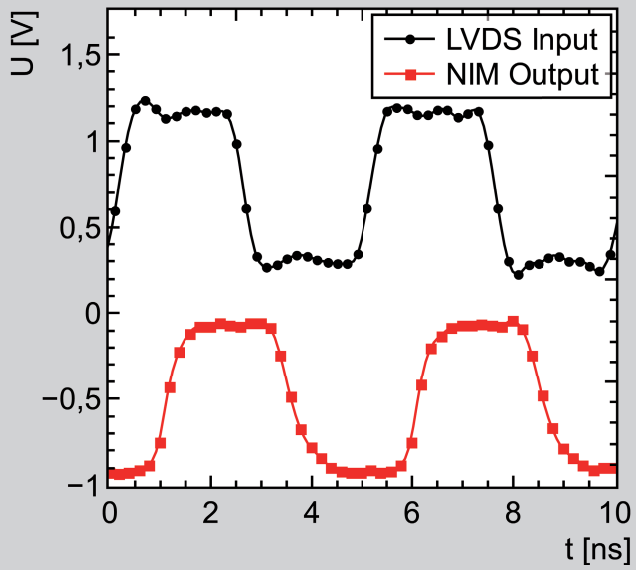
Status LEDs:

- for VCC and VEE

Output:

- NIM level outputs
- 32 connectors of type Lemo EPY.00.250.NTN

Conversion Example for a 200 MHz LVDS Signal



Specifications

Form Factor:

- VMEbus 6U (6HE, 4TE)

Power Supply:

- +5V, 2A (via VMEbus)
- efficient switching regulator for required NIM VEE
- modified edition with linear regulator for NIM VEE (accessing -5.2V or +12V at the back plane) available
- VMEbus as power supply, no data access required

Signal Conversion:

- 32 individual channels
- propagation delay: 6.7 ns (typical)*), 9.4 ns (max.)*)
- channel-channel skew: 1.6 ns
- direct signal conversion, no pulse shaping

*) value assured by design, not tested in production