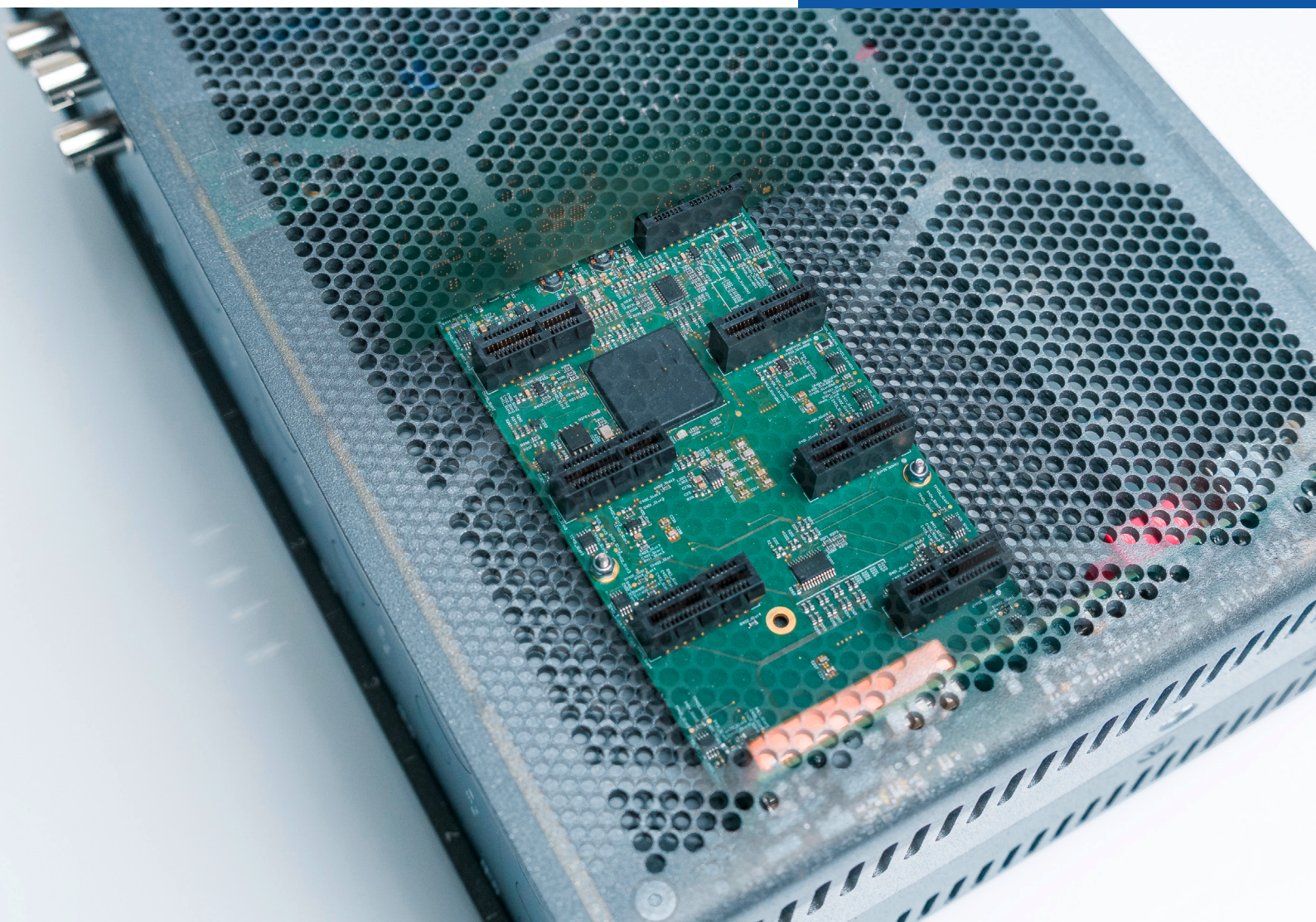




Code 7710/7711

coreBUS

labCORE I/O Bus Mainboard

coreBUS One

labCORE I/O Bus Mainboard Supporting only One Extension Board

OVERVIEW

coreBUS

Code 7710

labCORE I/O Bus Mainboard

coreBUS provides slots for up to ten extension boards in numerous configuration variants. Five slots are designated for specific extension boards at the front panel. The slots at the back panel have separated slot covers, allowing customized configurations. Five extension boards can be installed arbitrarily in any of the back slots.

coreBUS is an internal interface between the *labCORE* mainboard and optional extension boards which include specific interfaces. It distributes audio signals and control signals from/to the different boards and manages their power supply. It is required for the use of every *labCORE* extension board.

coreBUS One

Code 7711

labCORE I/O Bus Mainboard Supporting only One Extension Board

coreBUS One provides one slot for one extension board at the back panel. The optional coreBUS One I/O bus mainboard is an internal interface between the *labCORE* mainboard and one optional extension board which includes a specific interface. It distributes audio signals and control signals from/to the board and manages its power supply. It is required for the use of every *labCORE* extension board. coreBUS One is a cost effective alternative if no more than one extension board is part of the *labCORE* configuration.

KEY FEATURES

coreBUS provides ten slots for extension boards in various combinations

coreBUS enables quick retrofitting with additional extension boards

coreBUS distributes signals from the *labCORE* mainboard to the extension boards

coreBUS distributes signals from the extension boards to the *labCORE* mainboard

coreBUS manages the power supply of the extension boards

coreBUS One provides the same features as coreBUS for one single slot

APPLICATIONS

Adding optional extension boards to *labCORE* for:

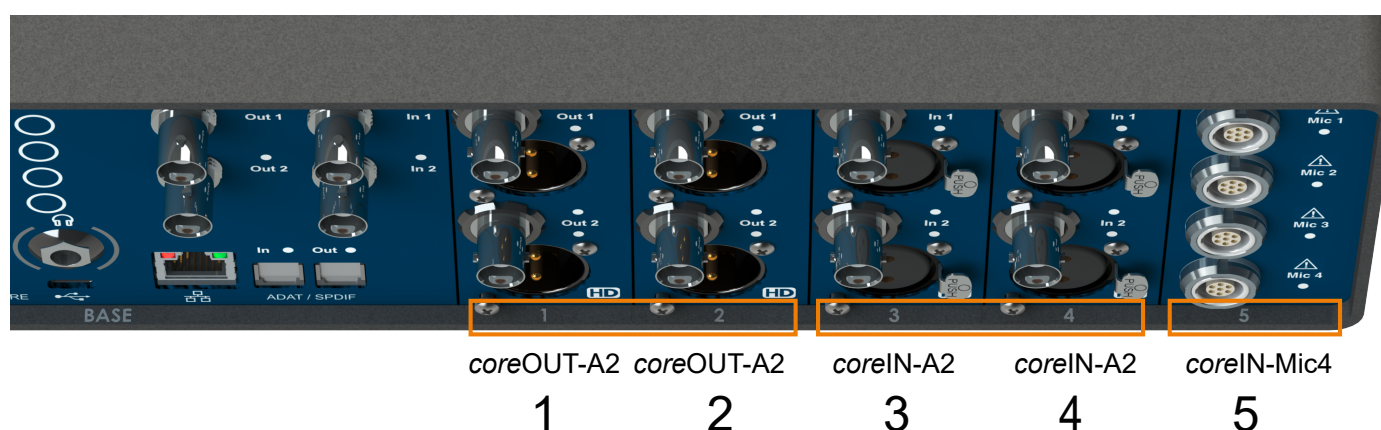
- › Various sophisticated input and output interfaces
- › Increased functionality

DETAILS

DESCRIPTION

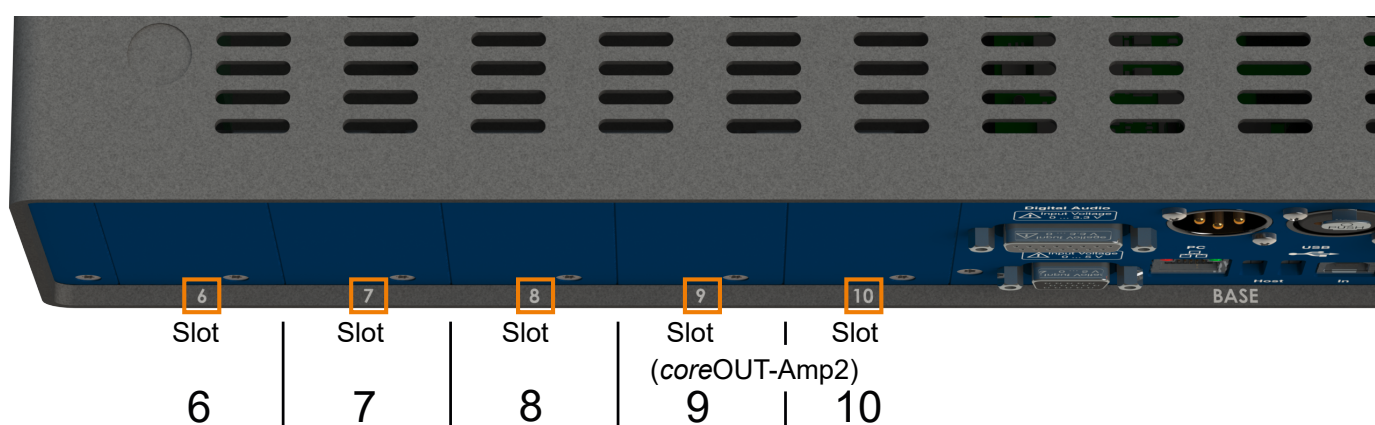
By default, *labCORE* already provides numerous high quality analog/digital inputs and outputs. Some measurement scenarios require specific interfaces, extra functionality, or high-definition signal processing. Therefore, *labCORE* provides ten slots for hardware extension boards. For operating these boards, *labCORE* requires the *coreBUS* I/O bus mainboard which provides ten slots. Furthermore, it is the connection interface to the mainboard of *labCORE*. *coreBUS* distributes audio signals from/to the extension boards, controls their signal transmission, and manages word clock and power supply.

Front Panel



The slots at the front panel are predefined. Slots 1 and 2 are exclusively prepared for two *coreOUT-A2* boards. Slots 3 and 4 are exclusively prepared for two *coreIN-A2* boards. Slot 5 is exclusively reserved for one *coreIN-Mic4* board. The labeling and status LEDs on the front panel of *labCORE* are preset according to respective boards.

Back Panel



The back panel of *labCORE* provides another five slots for customized equipping. The slots are numbered from 6 to 10 with separated slot covers. The boards *coreIN-Mic4*, *coreIN-ICP4*, *coreA2B-Basic*, *coreI/O-Dante*, *coreIN-A2*, and *coreOUT-A2* are applicable for any slot on the back panel. However, *coreOUT-Amp2* amplifier boards only apply to slots 9 and 10 because these slots are equipped with extra on-board power lines to accommodate the higher demand for current of *coreOUT-Amp2*.

coreBUS One

coreBUS One provides its single socket exclusively for slot 10 at the back panel of *labCORE*. It supports every available extension board.

List of Available Extension Boards

The following optional extensions are available:

- › *coreOUT-Amp2* (Code 7720)
 - » *labCORE* power amplifier board
 - » maximum 2 boards per *labCORE* unit
- › *coreIN-Mic4* (Code 7730)
 - » *labCORE* microphone input board
 - » maximum 6 boards per *labCORE* unit
- › *coreIN-ICP4* (Code 7735)
 - » *labCORE* ICP® sensor input board
 - » maximum 6 boards per *labCORE* unit
- › *coreOUT-A2* (Code 7750)
 - » *labCORE* analog output board
 - » maximum 2 boards per *labCORE* unit
- › *coreIN-A2* (Code 7760)
 - » *labCORE* analog input board
 - » maximum 2 boards per *labCORE* unit
- › *coreA2B-Basic* (Code 7791)
 - » *labCORE* I/O module, A²B interface (32 channels), Hardware + Main-/Sub-node mode
 - » maximum 2 boards per *labCORE* unit
- › *coreI/O-Dante* (Code 7796)
 - » *labCORE* I/O module, Dante® Interface
 - » maximum 2 boards per *labCORE* unit

GENERAL REQUIREMENTS

labCORE (Code 7700)

- › Modular multi-channel hardware platform

SCOPE OF DELIVERY

Depending on the *labCORE* configuration:

coreBUS

coreBUS (Code 7710)

- › *labCORE* I/O bus mainboard

Initial equipping

- › *coreBUS* is installed to *labCORE* during production

Retrofitting

- › Send in *labCORE* to HEAD acoustics for installation

coreBUS One

coreBUS One (Code 7711)

- › *labCORE* I/O bus mainboard, supporting only one extension board

Initial equipping

- › *coreBUS One* is installed to *labCORE* during production

Retrofitting

- › Send in *labCORE* to HEAD acoustics for installation

Possible Slot Positions of Extension Boards on coreBUS

The table presents the possible slot positions for each board. Each slot operates one extension board.

		Front panel slots					Back panel slots				
		1	2	3	4	5	6	7	8	9	10
Boards	coreOUT-Amp2									✓	✓
	coreIN-Mic4					✓	✓	✓	✓	✓	✓
	coreOUT-A2	✓	✓				✓	✓	✓	✓	✓
	coreIN-A2			✓	✓		✓	✓	✓	✓	✓
	coreIN-ICP4						✓	✓	✓	✓	✓
	coreA2B-Basic						✓	✓	✓	✓	✓
	coreI/O-Dante						✓	✓	✓	✓	✓

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