TOB Control Loop Block Diagram
for DS-layer 1-2
LV, R/O and Control Signals

Primary Loop [A]

OUTSIDE TOB-VOLUME

INSIDE TOB-VOLUME

Primary Loop [A]

Inter Connect Bus [ICB]

“Hard Box” outside TOB End-flange
includes
2x Rx/Tx
DOHybrids
and
1x LV power
connector
(mounted on a mother-PCB
ca. 70x80 mm)

Two cables receive and transmit
all necessary control signals
between CCUMs and DOHM
as well as needed LV power.

Service Cable 1
type Ø6

Digital Opto Hybrid Module (DOHM)

Ladder 1
(6 DS-mods)

32ch
LVDS

+2.50 V
0; 1.25; 2.50 V
Vbias

Sensors

Fibers

Ladder 2

12C: sclk =12x1
sdata =12x1
LVDS: 1x2
rstB: 1x1
fibers: 6x5
Bkp pulse: 6x1

Ladder 3

+2.50 V 10.2 A
+ 1.25 V 3.9 A
GND 14.1 A

Ladder 6

TOB End-flange
includes
2x Rx/Tx
DOH

and
1x LV power
connector
(mounted on a mother-PCB
ca. 70x80 mm)

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1[2]
The diagram represents the TOB CCUM Block Diagram for DS-layer 1-6 Control Signals. It includes the transmitter and receiver parts for DOHM (Digital Opto Hybrid Module) with digital opto hybrid module (DOHM) labeled. The diagram shows the connections and signals for LADDER 1 and LADDER 2, including input male connector at ladder end panel and output female connector on short cable, outside ladder. The diagram also highlights the CCUM-board with a 80-pin NAIS connector, mounted on the board, feeds all necessary signals to the ICB-board. Two short cables (ca. 22+12 cm) receive and transmit all necessary control signals between CCUMs, and LV power.