



Elektrobit

EBX3 boxed – next gen data logging

Small in size, low power consumption, broad temperature range & onboard SSD-storage



www.elektrobit.com

EBX3 boxed

A compact and flexible data logging solution for every need:

- Data collection on the road
- Field testing
- Endurance testing



Highlights

- Small in size & low in power consumption
- Interface flexibility
- No additional PC or application SW needed

Power consumption: **62W – 85W**

230 x 140 x 55mm (w/o SSD)
230 x 140 x 90mm (incl. SSD)

Customer specific interface development

Additional features:

- Operation range -20°C to 70°C
- Up to 32 TB storage capacity
- SSD write rates ~ 7 GB/s
- Booting time of < 4sec
- Webserver & health monitoring

2x GMSL2/3 TAP

2 RX, 2 TX for camera TAP mode
Logging of CSI-2, I2C and GPIO side band communication

Display

On board device status

Rotary Knob

Control Input for device

Main Power Supply

6V-24V
40W-85W (use case dependent)

Power Button

Main Power Supply

USB-C (USB 3.0)

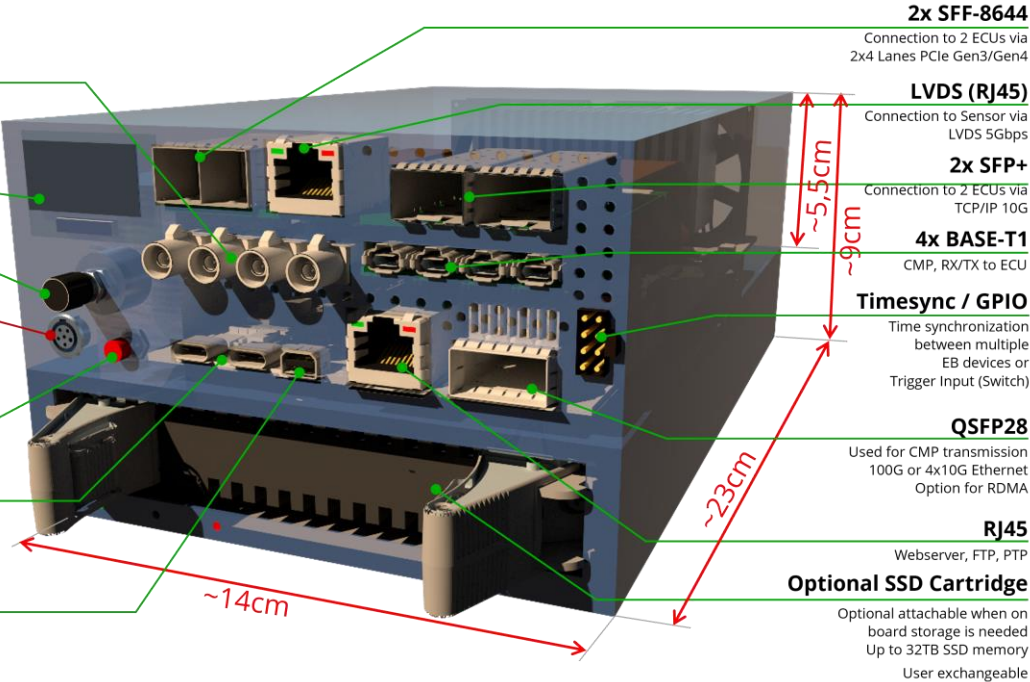
Future Use: SSD access, Logging

USB-C (USB 2.0)

Future Use: i.e. mouse, keyboard, remote control

Displayport

Future Use: Logger configuration, Linux Shell, Webserver



2x SFF-8644

Connection to 2 ECUs via
2x4 Lanes PCIe Gen3/Gen4

LVDS (RJ45)

Connection to Sensor via
LVDS 5Gbps

2x SFP+

Connection to 2 ECUs via
TCP/IP 10G

4x BASE-T1

CMP, RX/TX to ECU

Timesync / GPIO

Time synchronization
between multiple
EB devices or
Trigger Input (Switch)

QSFP28

Used for CMP transmission
100G or 4x10G Ethernet
Option for RDMA

RJ45

Webserver, FTP, PTP

Optional SSD Cartridge

Optional attachable when on
board storage is needed
Up to 32TB SSD memory
User exchangeable

New interface modules (2025 onwards)

Custom	LVDS	SFP+	QSFP+	Ethernet	BASE-T1	Flexray	DSI3	CAN-FD	GMSL2/3	GPIO
Development of customer specific modules	Aurora Receiver AGBT 2.5Gbps/lane	10G TCP/IP module	10/40G TCP/IP module	(g)PTP synchronization in slave or master mode.	Multi Gigabit automotive BASE-T1 1G/2.5G/5G/10G	2 channels per module	For ultrasonic sensors	2 channels per module	2 RX Links + 2 TX Links, TAP mode	SPI, I2C, GPIO

Available interfaces (as of Q3/2024)