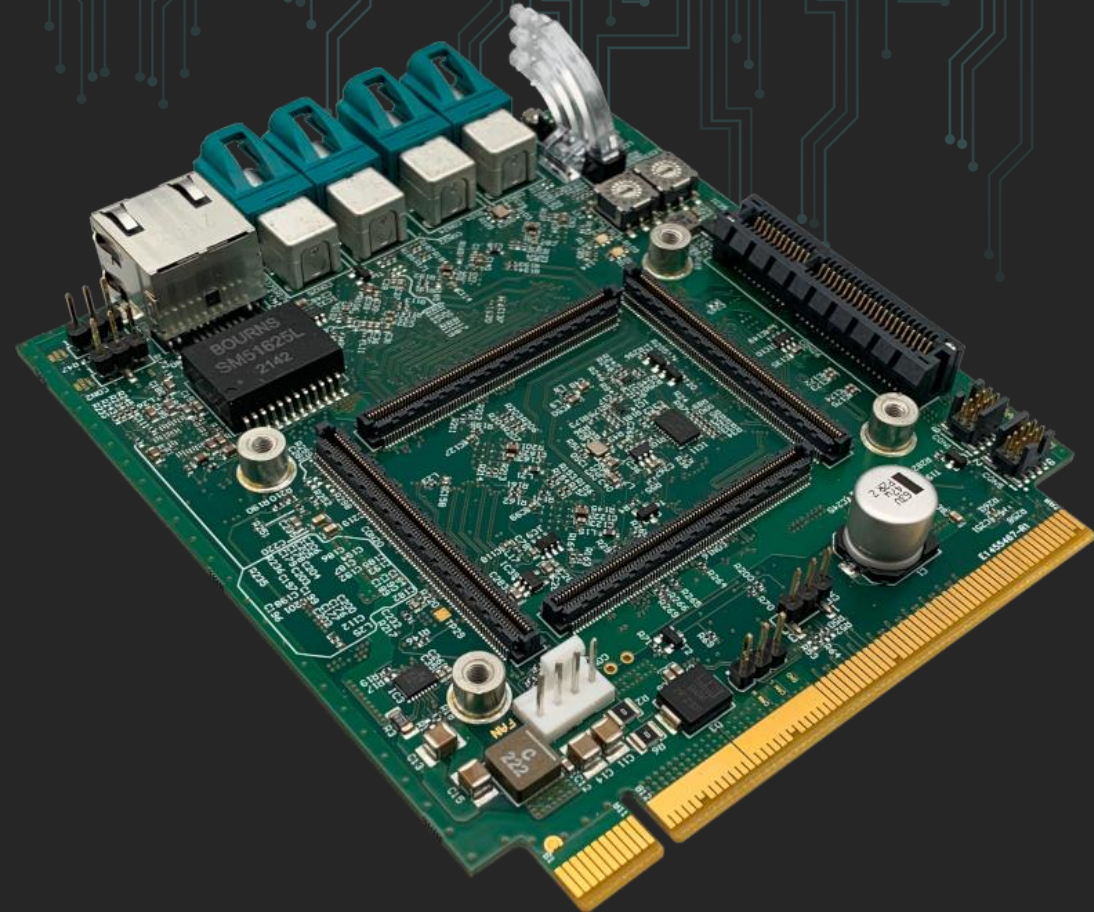


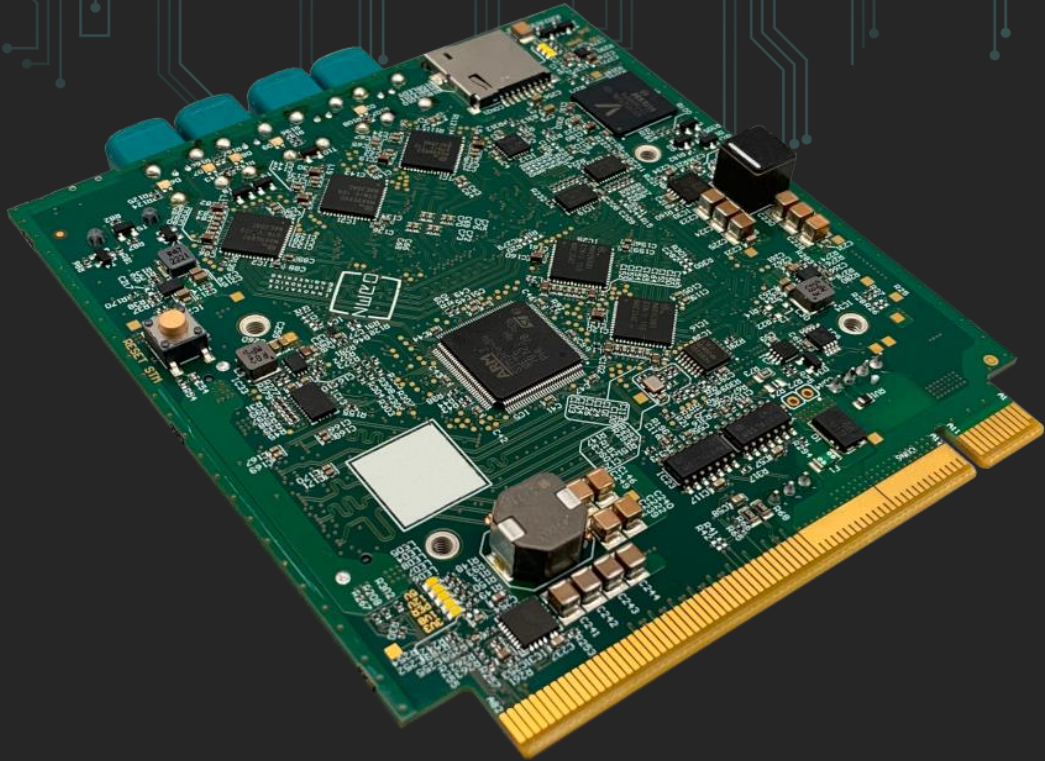
INNOVATIVE ELECTRONICS ENGINEERING



ZERO
GMSSL NODE
ZYNQ UltraScale+

AUTOMOTIVE-GRADE VIDEO PROTOTYPING





WIDE RANGE INPUT VOLTAGE [9-55V]

3x STATUS LED

1x CAN FD

4x GMSL3 DESERIALIZER

1x GMSL3 SERIALIZER [LINK A & B]

1x PCIe x4 SLOT [GPU, NETWORK, STORAGE]

1x ETHERNET [MANAGEMENT PORT]

FPGA: ZYNQ Ultrascale+ ZU4

AUTOMOTIVE-GRADE CONNECTORS

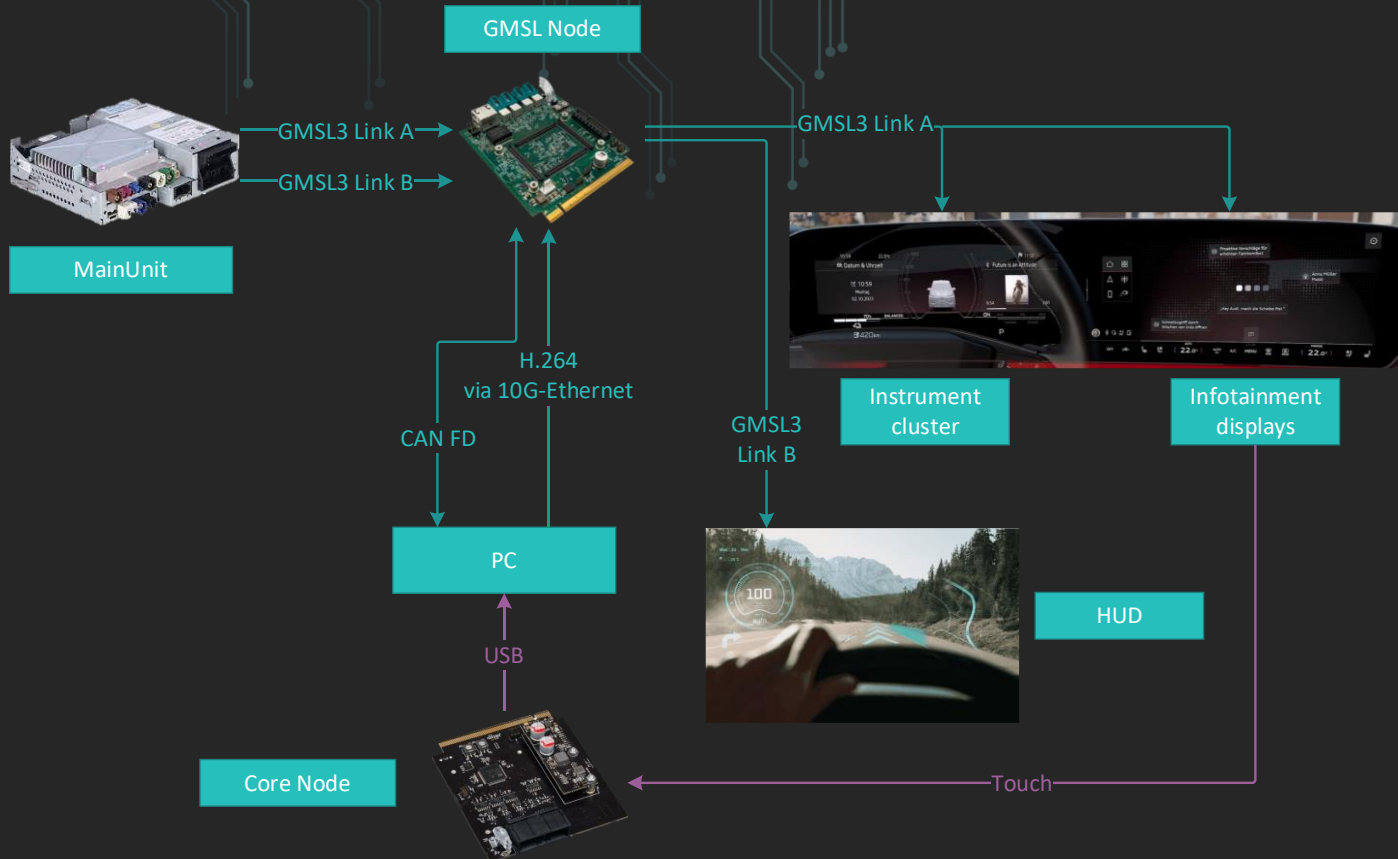
ZERO

GMSL NODE

ZYNQ UltraScale+



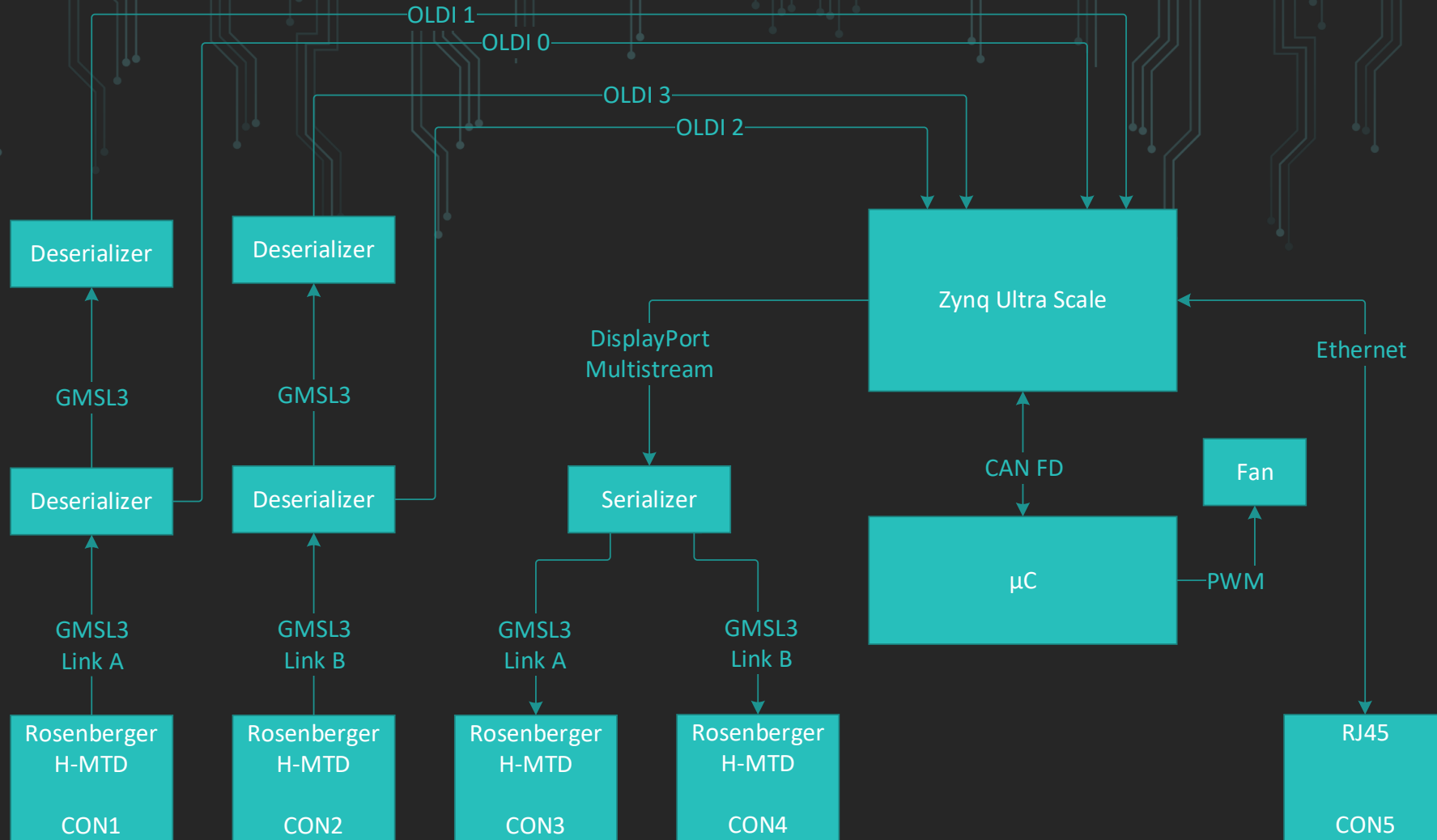
GMSL Node Use Cases



- Control streaming pipelines and overlay features via CAN bus
- Read system status information via CAN bus
- Optional video output via 10G-Ethernet in x.264 format
- Color-Based overlay: all pixels with the same color can be overlaid with the video from the HDMI input
- Use the touch functionality of original infotainment display to interact with the custom video content
- Show a new infotainment UI on a vehicle without adapting software to the in-vehicle MainUnit



GMSL Node Block Diagram

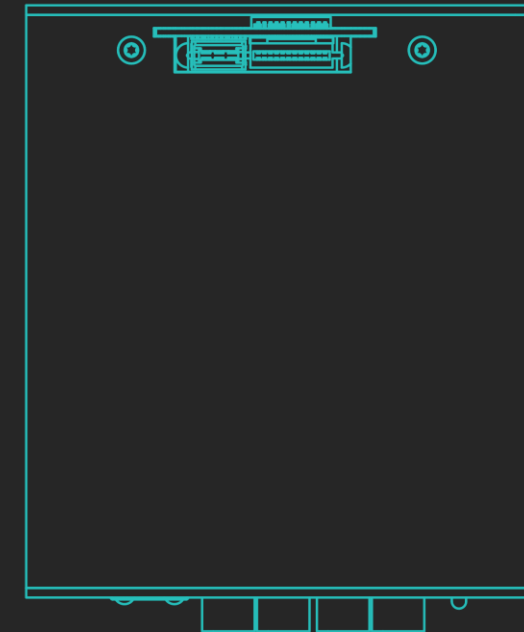
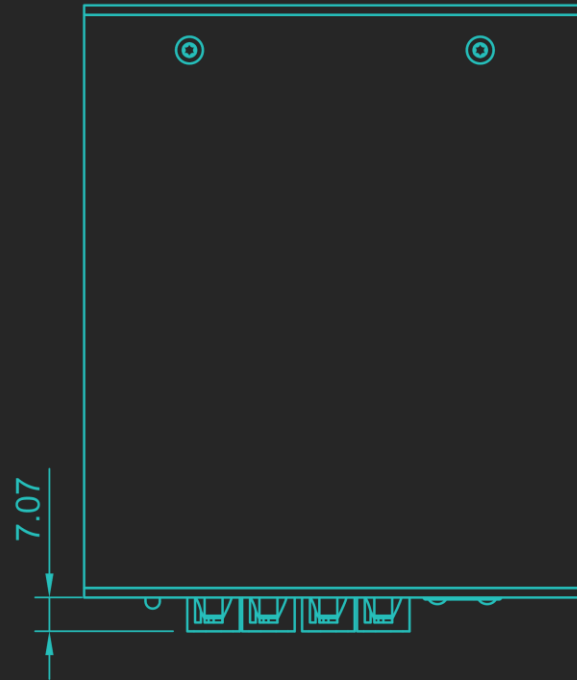
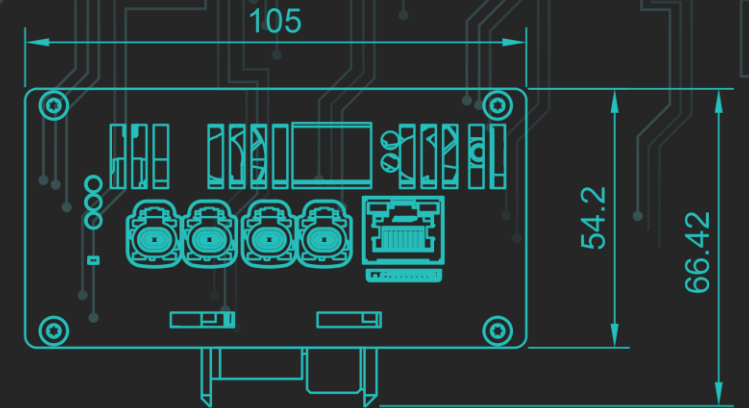
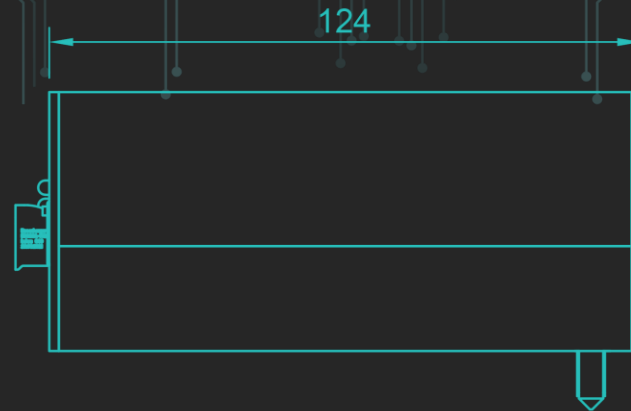
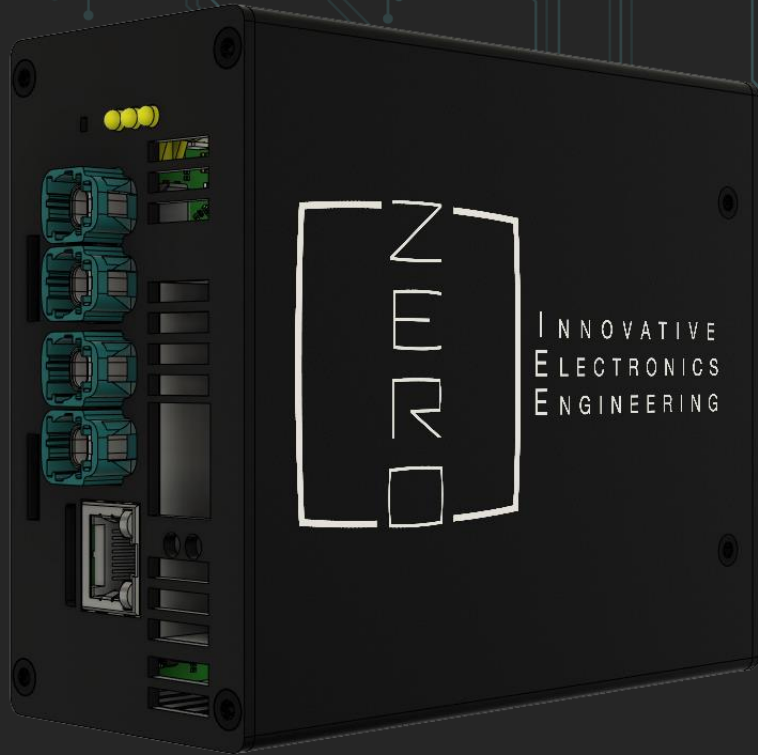


GMSL Node Datasheet

| | |
|-------------------|--|
| <p>Interfaces</p> | <ul style="list-style-type: none"> ▪ Front panel <ul style="list-style-type: none"> ▪ 2x GMSL3 IN, 2x GMSL3 OUT <ul style="list-style-type: none"> ▪ Rosenberger H-MTD ▪ part number (socket): E6S20A-40MT5-Z ▪ part number (plug): E6K10A-1xxZ5-Z ▪ 1x 100BASE-TX ETHERNET (RJ45) ▪ On-board <ul style="list-style-type: none"> ▪ 1x PCIe 4x ▪ FlexPins |
| <p>Computing</p> | <ul style="list-style-type: none"> ▪ FPGA: Zynq Ultrascale+ ZU4 ▪ STM32 Microcontroller |
| <p>Dimension</p> | <ul style="list-style-type: none"> ▪ 124 x 105 x 44 mm (w x d x h) |
| <p>Weight</p> | <ul style="list-style-type: none"> ▪ 757g |
| <p>Power</p> | <ul style="list-style-type: none"> ▪ Input voltage: 9 - 55V DC ▪ Idle power consumption: 7,3W (608mA @ 12V) |
| <p>Other</p> | <ul style="list-style-type: none"> ▪ Mounting: DIN rail (TH35) and screw straps ▪ Updates <ul style="list-style-type: none"> ▪ The firmware can be updated by the user via CAN / openBLT ▪ The operating system is fully accessible to the user ▪ Extensive configuration options for live video manipulation including multiple inputs ▪ LEDs: 1x Power indicator, 1x Status, 1x User-programmable |



GMSL Node Drawing





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Thank you for your interest in the AMPS GMSL Node! For further information, please visit our website or contact us.

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