Overview

Embedded Expandable Module
32-Bit System

The EXM32 Concept

- EXM32 targets low-power RISC CPUs starting from 16-Bit Low-Cost to 32-Bit high-end CPUs.
- Modules are designed to operate in rugged environmemts
- Wide operating Temperature Range -40/+85°C
- No active cooling
- Encapsulated design relieves baseboard from most high-speed issues and most management tasks.
- 100% SMT & no memory modules or other “loose” components.
- Footprint (90 x 65 mm) small enough for handheld units, yet big enough for additional peripheral devices and memories

The EXM32 Concept (2)

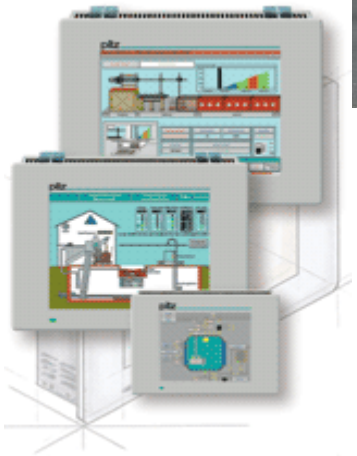
- Revolutionary connector technology allows easy integration and extension without cost penalty
- Simple IO-interfaces make baseboard-designs easy & transparent without chasing PC technology and short-lived components
- Wide scaling range of performance, cost & power

Typical Applications

- **POS / POI**
  - Point-of-Sale
  - Point-of-Information

- **Telematics**
  - On-Board Units

- **Industrial**
  - Control panels
  - Communication modules
  - Outdoor applications



EXM32

EXM32 Custom System

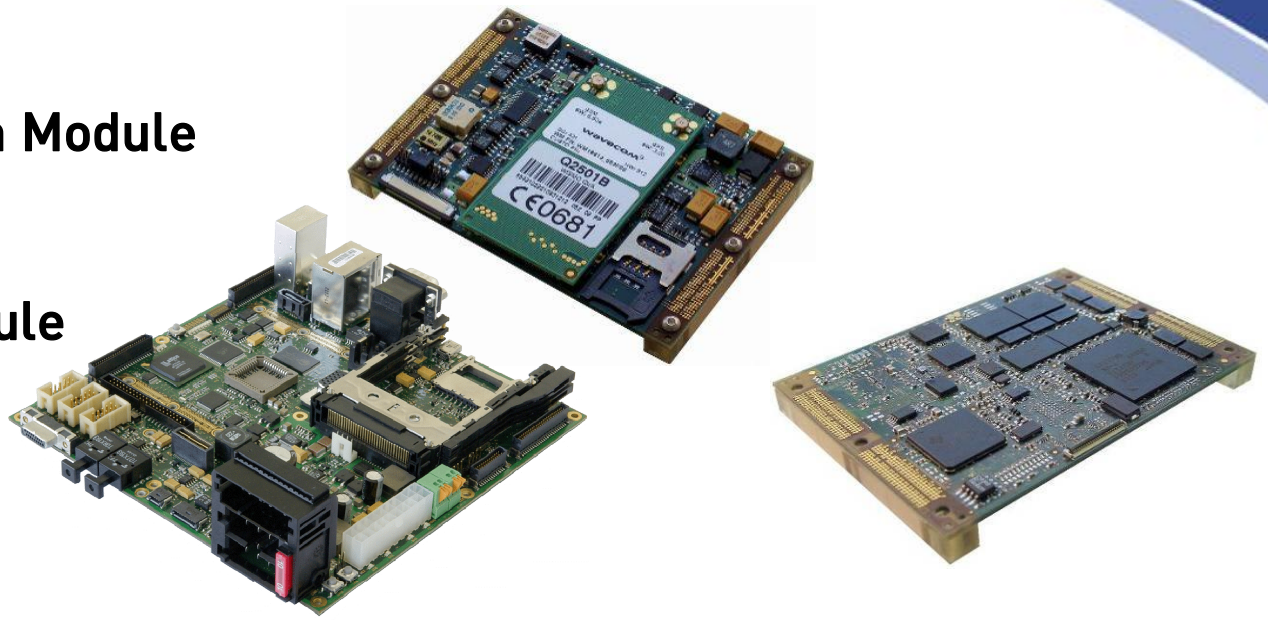
EXM32 Extension Module

+

EXM32 CPU Module

+

EXM32 custom Motherboard



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Customized EXM32 System

EXM32 Interfaces

10/100/1G LAN
2x CAN
2x USB

1x FlexRay
2x UART
2x I²C

2x IEEE 1394 FireWire
2x Digital Video BT.656

1x TFT LCD
1x TFT/16GPIO/CAM-IF
CRT Video Out

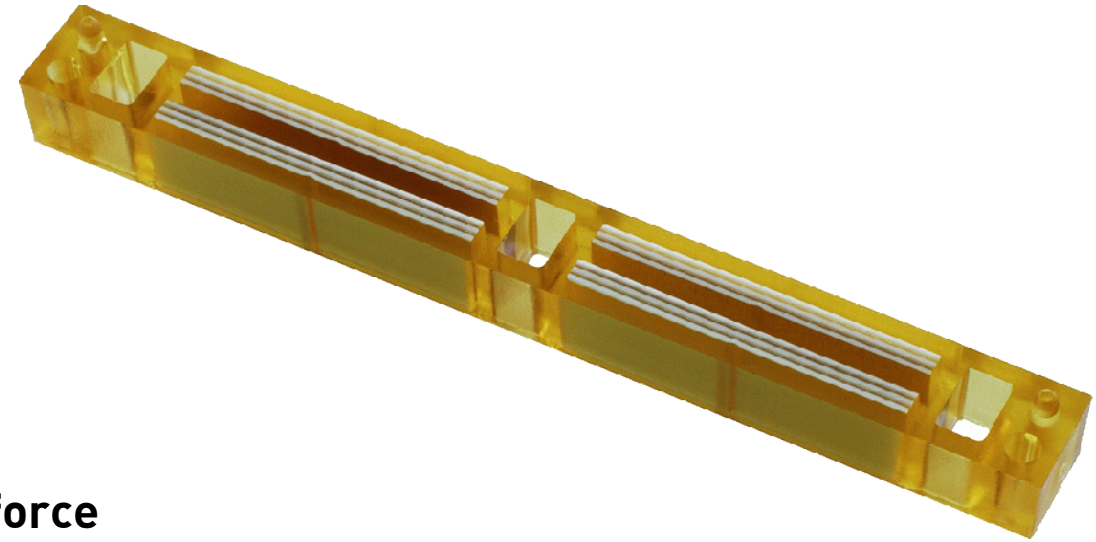
Generic 32-bit
Processor Bus

CompactFlash
MMC/SD/SDIO

PCIe X1

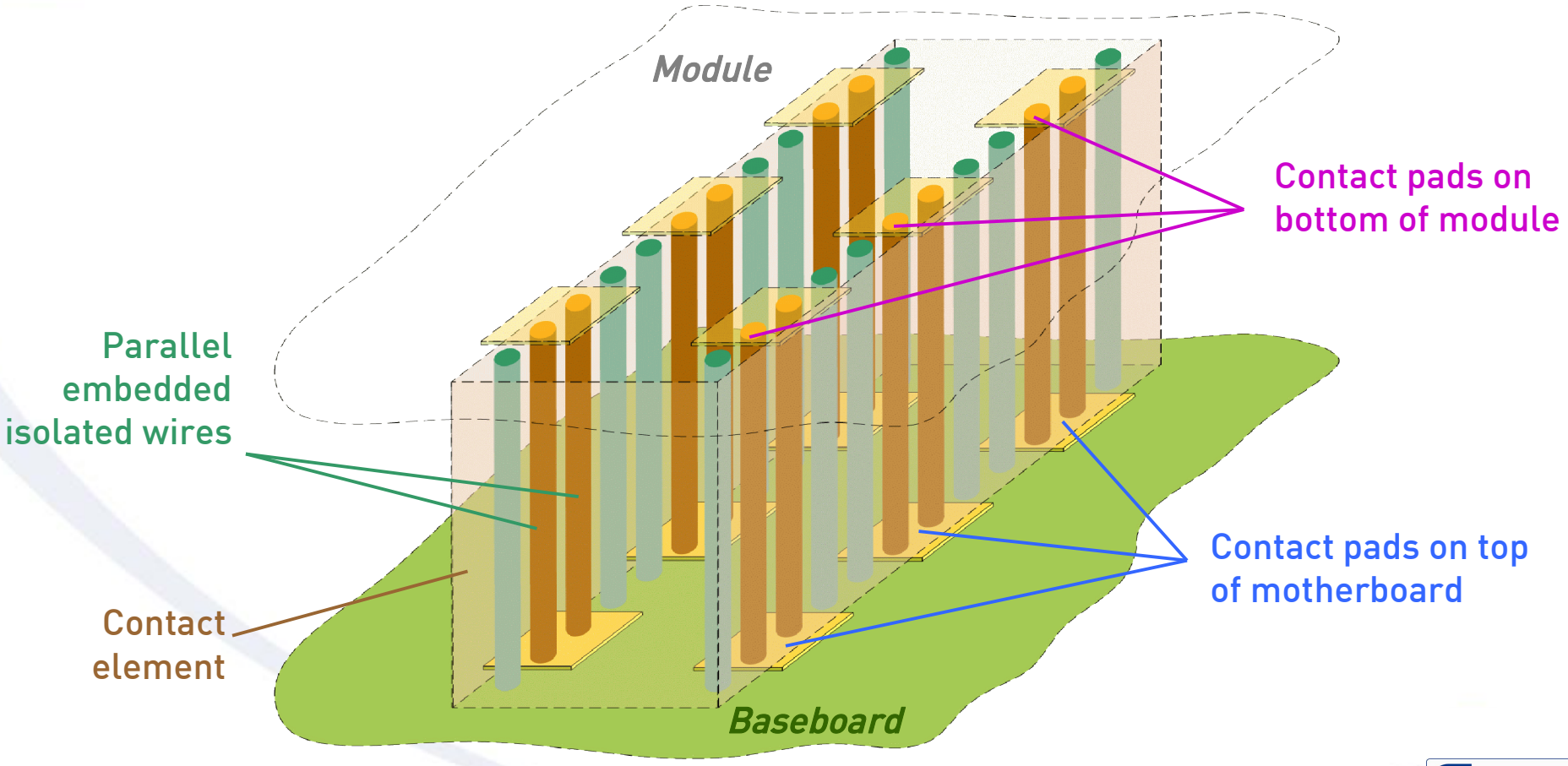
SPI
AC'97 / I²S Audio

EXM32 Connector
Single Piece Board-Stacking Technology

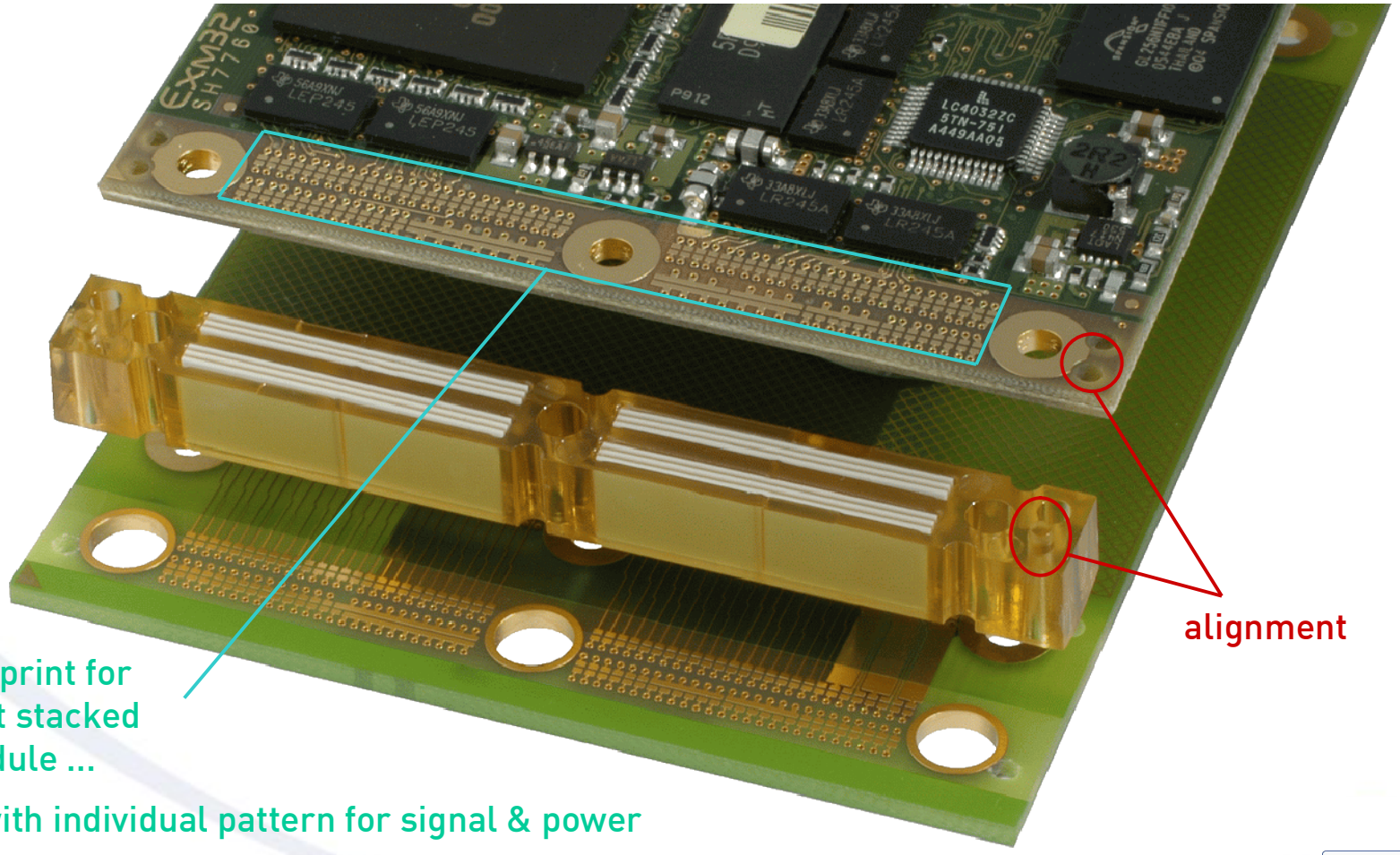


- stackable
- small outline
- zero insertion force
- no soldering
- wide temperature range (-40° to + 105°C)
- shock & vibration resistant (automotive certfication)

EXM32 Connector Technology
- how it works -

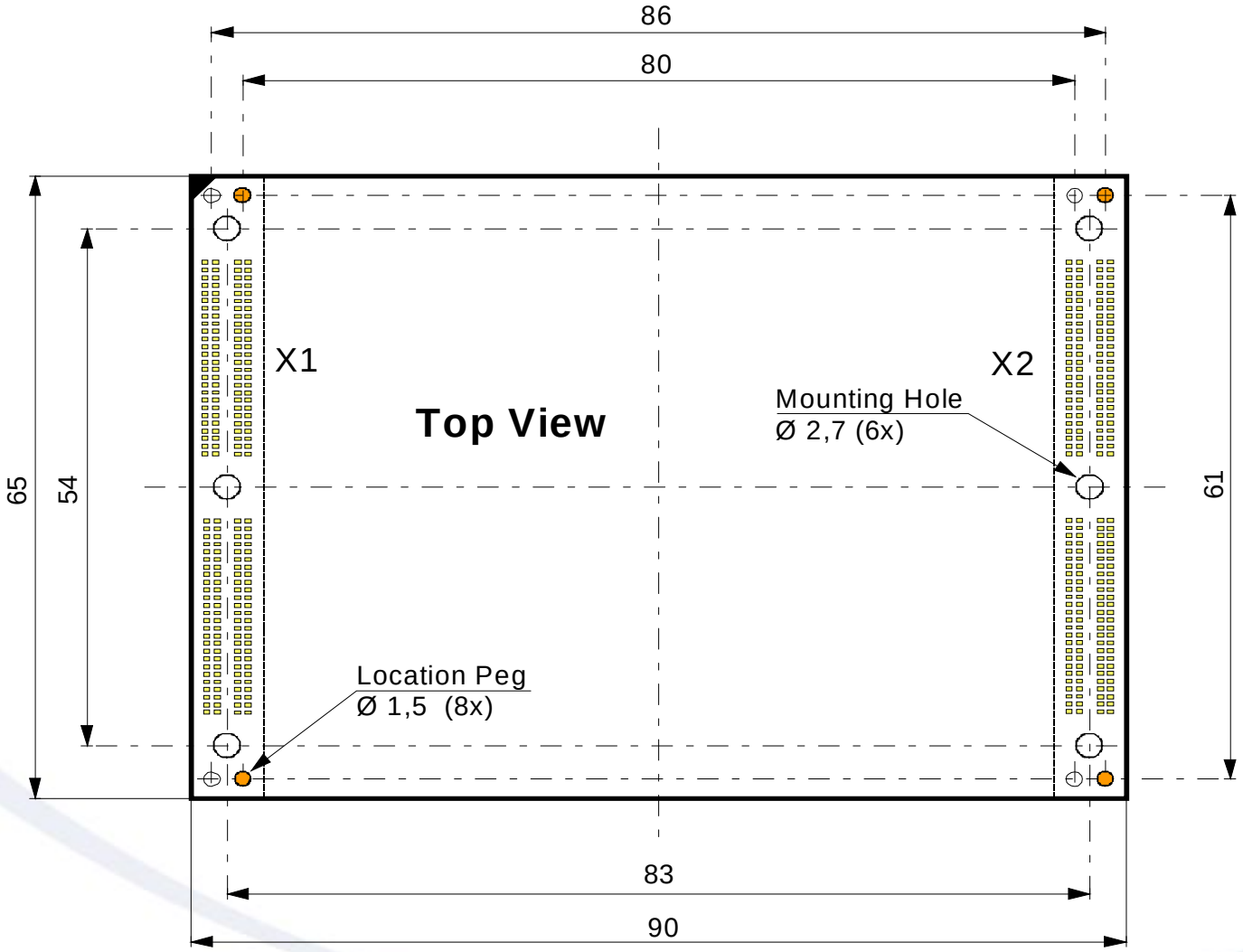


Pad Geometry



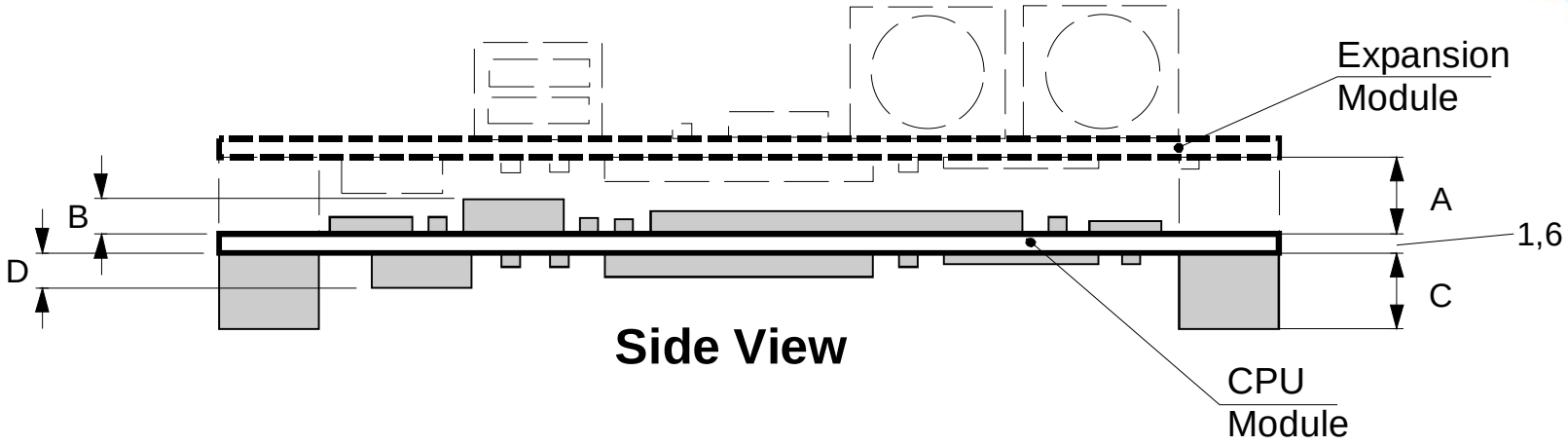
... with individual pattern for signal & power

EXM32 Module Dimensions



All dimensions in mm

EXM32 Module Dimensions (2)



Side View

Expansion Connector Height **A**	6,5
Top Component Height **B***	4,0
CPU Connector Height **C**	6,5
Bottom Component Height **D****	2,0

All dimensions in mm