

/ Smarc & OSM modular computing solutions



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Talks about #design, #software, #computing, #leadership, and #platformstrategy

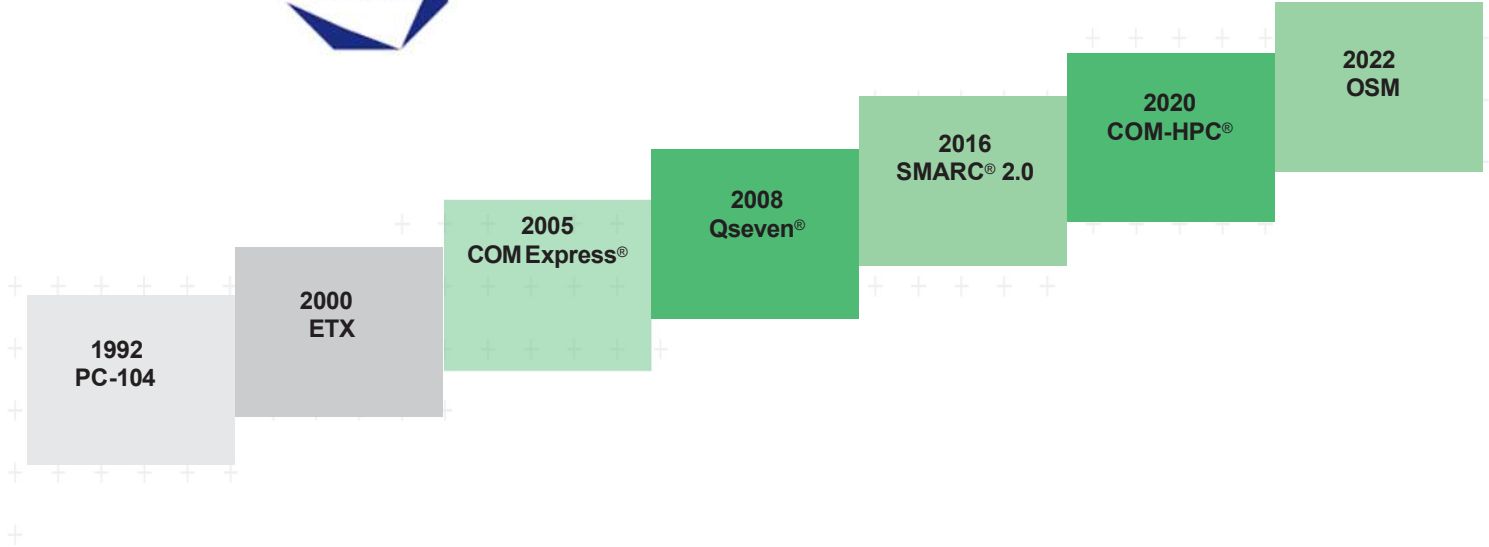
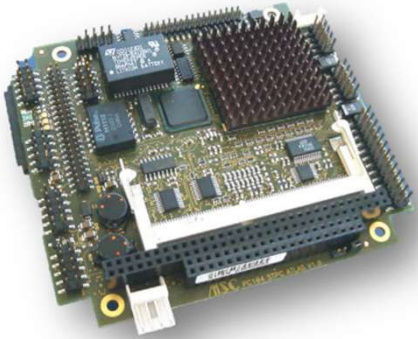
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/ History of standards



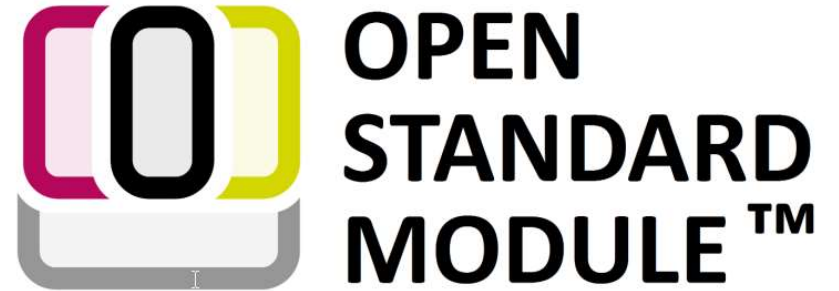
/ Chip down or modular approach?



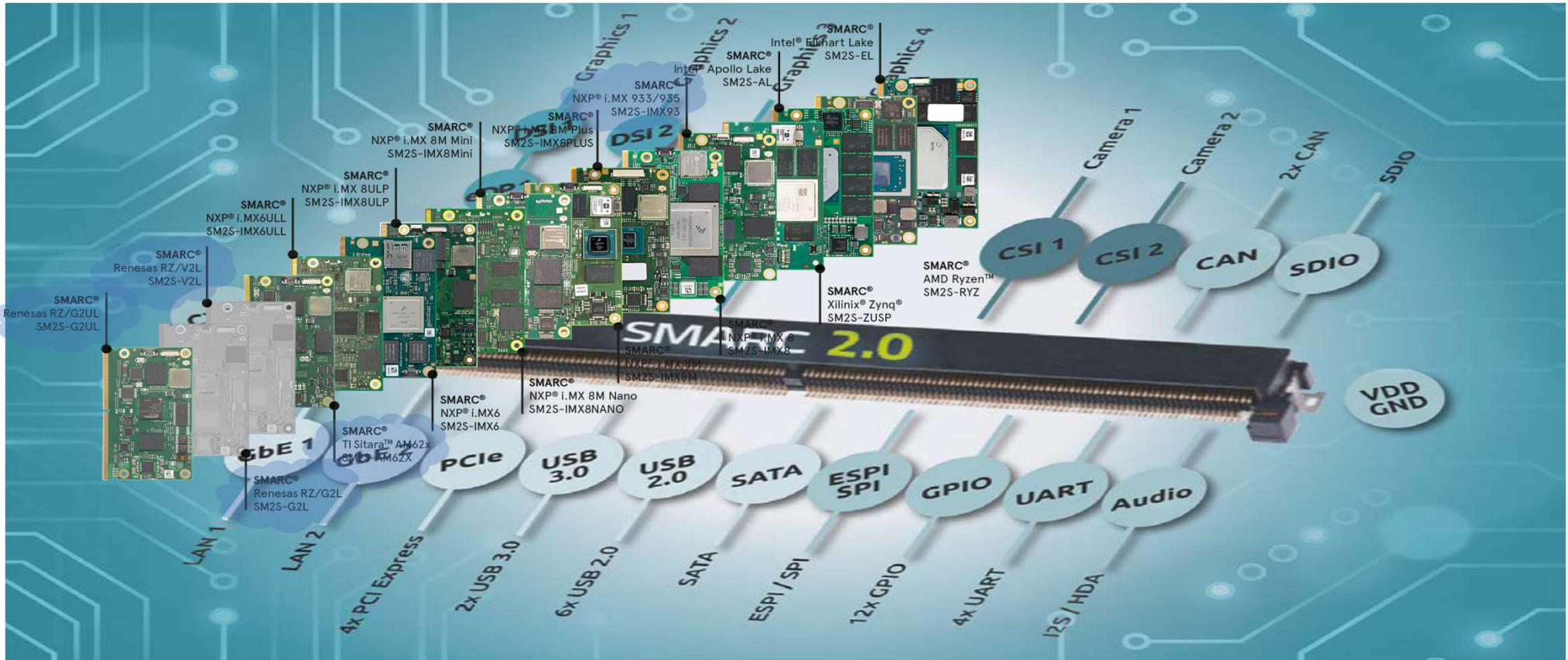
VS



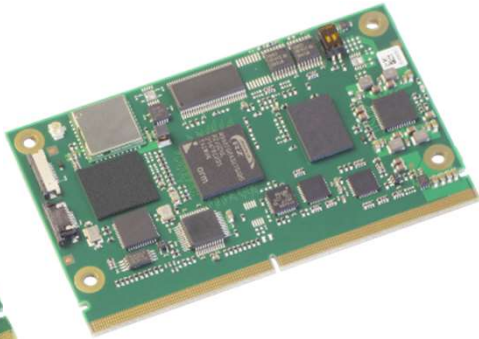
/ Why standard?



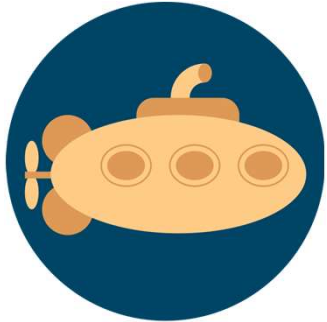
What is SMARC module



/ What new is coming to smarc standard



/ How smarc is supported



U-Boot

4.7. Building Images

To build all supported images for the installed BSP, do:

```
user@devhost:msc-ldk$ ./setup.py --bsp=01047
user@devhost:msc-ldk$ cd build/01047
user@devhost:01047$ make
Loading cache: 100% |#####| ETA: 00:00:00
Loaded 2703 entries from dependency cache.
...1
```

/ Typical applications for smartc



HMI



HMI



HMI



HMI



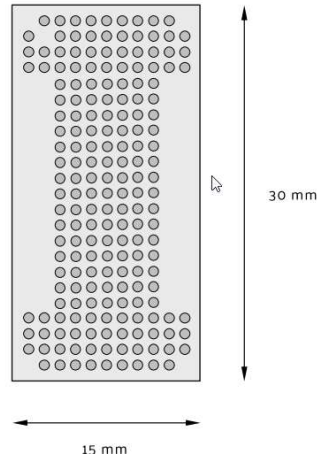
HMI



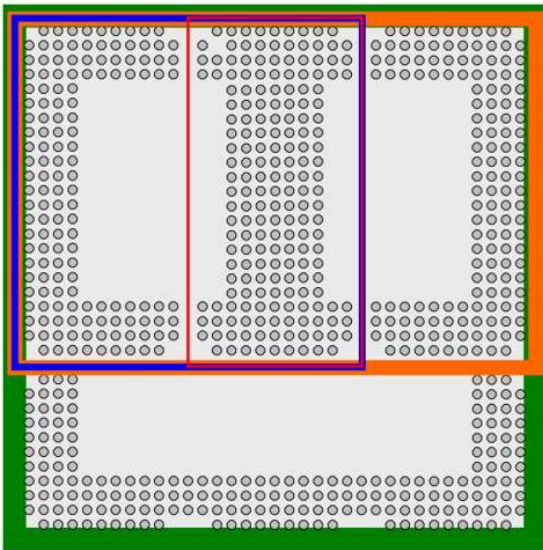
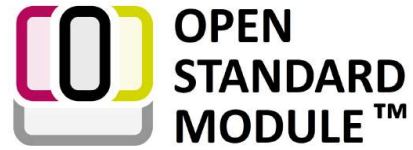
/ Limitations of smarc



2.1.3.1 Size-0



/ New OSM standard



- **Size-0 – “Zero”:** 30 mm x 15 mm / with **188 contacts** → shown below with **red** outlines
- **Size-S – “Small”:** 30 mm x 30 mm / with **332 contacts** → shown below with **blue** outlines
- **Size-M – “Medium”:** 30 mm x 45 mm / with **476 contacts** → shown below with **orange** outlines
- **Size-L – “Large”:** 45 mm x 45 mm / with **662 contacts** → shown below with **green** outlines

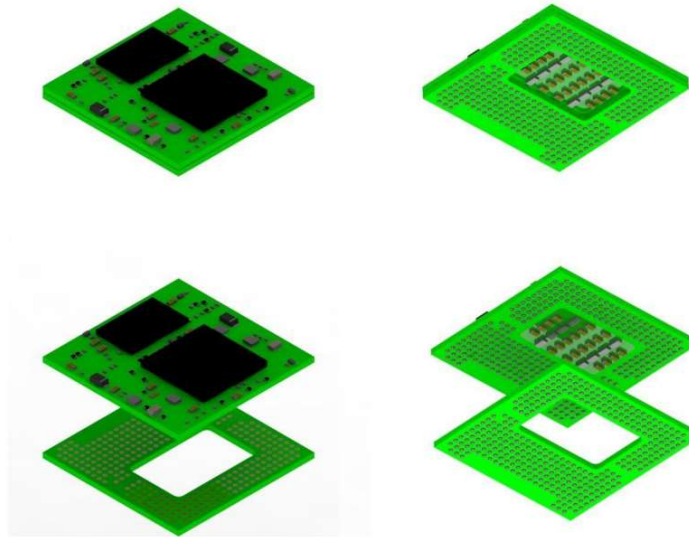
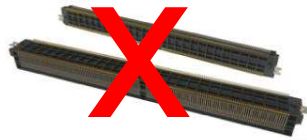
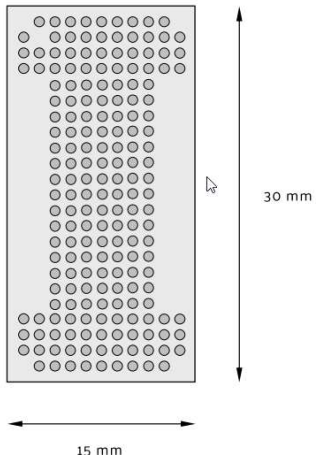


Figure 13: Schematic illustration of the Spacer PCB for Extended Height E (Size-S)

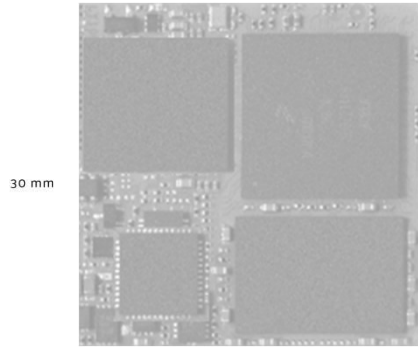
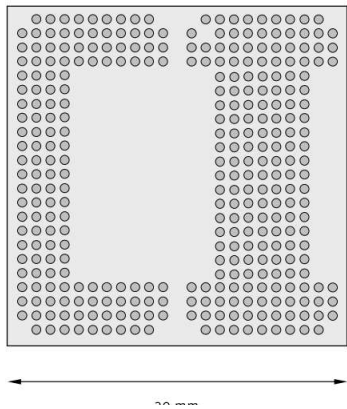
/ Why OSM?

2.1.3.1 Size-0



OSM products coming

2.1.3.2 Size-S

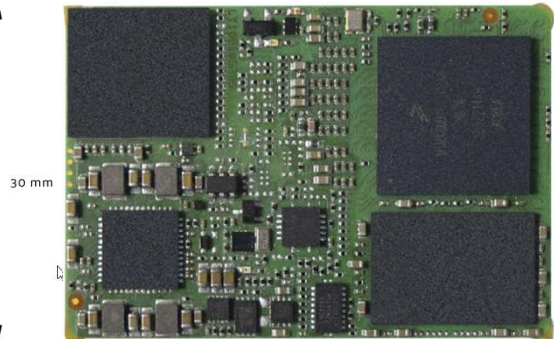
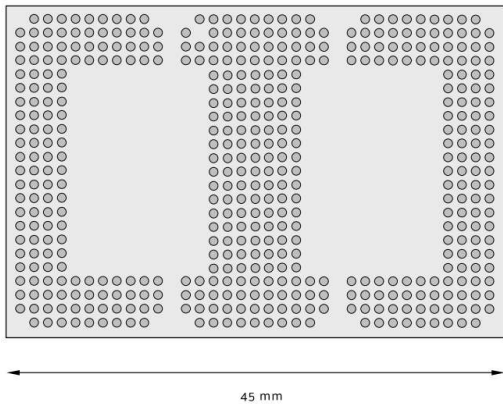


30 mm

OSM-SF-IMX93
OSM-SF , 332 Pin
i.MX 930x/933x/935x
1-2x Cortex A55+M33+NPU

OSM-SF-IMX91
OSM-SF , 332 Pin
i.MX 911x/913x
1x Cortex A55 Neon

2.1.3.3 Size-M

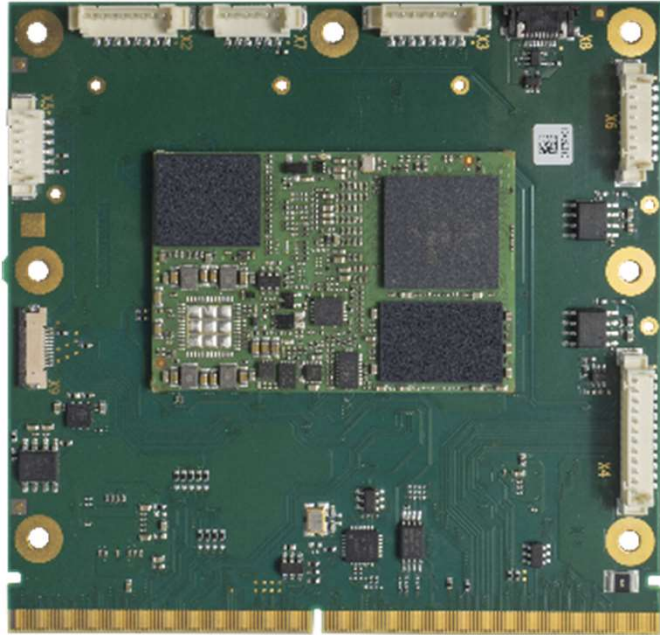


30 mm

45 mm

OSM-MF-IMX8MINI/NANO
OSM-MF , 476 Pin
i.MX 8M MINI/NANO
1-4x Cortex A53+M4/M7

/ Developing OSM



/ Time for lunch 😊



Questions