

Other Manufacturers which offer Components for Avionic Applications Represented by Protec GmbH:

HOLT Integrated Circuits:

Avionic data bus products ARINC429, MIL-STD-1553, ARINC717, ARINC825 (CAN), RS422 / 485, Discrete to Digital, Switches

Everspin:

Non Volatile MRAM, which can replace many other Types of non-Volatile and also SRAMs

VPT:

DC-DC Converter and EMI Filters Hybrid technology for small size, light weight, maximum reliability. No derating necessary.

SMC:

Commercial Diodes 0.5A-50A, 50V-400V, up to 30KW in DO-41, DO15A-405, SMA, SMB, SMC and more, available with full Traceability und Screening for Avionic needs

AEM Inc.:

Fuses and Ferrite Chip Beads for noise, EMI and RFI suppression, both are EAR99
AEM also offers Tin Whisker mitigation

Ultra Com.:

Optical Receiver und Transmitter up to 12,5GBps / 4xRx and 4Tx in one Part

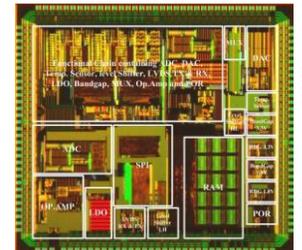
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IMST GmbH – ASICs or FPGA Conversions for Avionic Applications DAL-A and DO-254

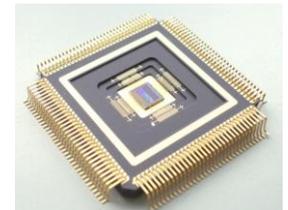
IMST offers "state of the art" Mixed Signal ASICs for avionic applications, the library elements are selected in such way, that they are able to provide a full set of useful circuit blocks, which are needed to build up a wide range of different ASICs.



IMST is designing the ASICs for **DAL-A, DO-254 level** (EA SA CM No. EASA CM - SWCEH - 001 Issue No. 01)

IMST Customer Support

- Full Turn Key IC Design Solution
- Flexible Business Models
- IP Licensing Models
- Support of entire Product Development Flow
- Management of Design, Test, and Packaging



132- lead CQFP package example

FPGA to Full Custom IC Design

- IMST uses Xilinx and Altera FPGA systems
- IMST has got experience in transfer VHDL or Netlist data base into full ASIC design
- Adding e.g. I/Os, Memory, PLLs, ADC/ DACs to pure digital design
- IPs for such blocks are available for many process nodes

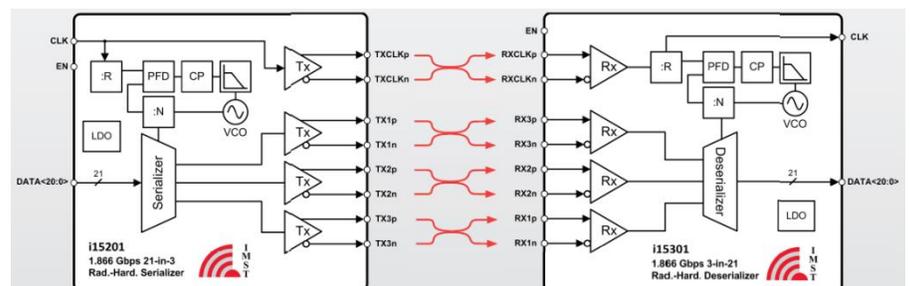
Foundry Processes

- TSMC
- Globalfoundries/ IBM
- ALTIS Semiconductor
- X-Fab
- IHP



IMST is member of EURORACTISE, MOSIS

- IMST can offer a broad range of advanced silicon technologies on a MPW basis
- Special agreements and support to IMST
- for small volume production by foundries
- Experience and IPs from 40nm, 55nm, 65nm, 90nm, 130nm, 180nm



example block diagram for Serializer and Deserializer ASICs