Protec GmbH
Vertrieb elektronischer Bauteile

AVIONIC COMPONENTS NEWSLETTER *JUNE 2013*

TVS Diodes from SMC

SMC is launching a whole new line of TVS Diodes specially for the Avionic Market. For this Product line, Customers will get the following features (most of them are required by Airbus):

- CoC
- 100% Testing
- Full Traceability back to the Wafer lot
- SMC own Die (no third party die)
- Qual Data for each Product Family
- Up screening if required

SMC was Audited and approved by Airbus / Thales / EADS. SMC can also offer very competitive commercial pricing.

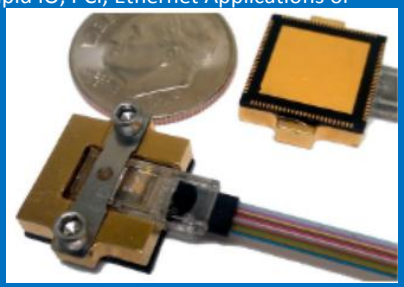
Diode Types:

- 15kW SMD (Uni- / Bi-Directional)
- 15kW Axial (Uni- / Bi-Directional)
- 30kW SMD (Uni-Directional)
- 30kW Axial (Uni- / Bi-Directional)
- 50kW Axial (Uni- / Bi-Directional)
- 5kW SMD.. Gullwing and J-Lead
- 3kW SMD… Gullwing and J-Lead
- 0.4 to 1.5kW TVS are also available

HighSpeed Optical Communication ICs for Fiber

from Ultra Communication

4 channel (each 2.5 Gbps) Transceiver for Rapid IO, PCI, Ethernet Applications or



4 channel (each 12 Gbps) Transceiver for Rapid IO, PCI, Ethernet Applications

Other products like testing devices for Fiber cables, RX and TX in one IC or up to 40 Gbps

For more information on the optical transceivers or any other Product on this Newsletter, please contact Protec GmbH

HOLT Product Range

Holt's range of avionics products has served the aerospace industry for many years. Many of Holt's data bus product lines integrate analog transceiver and digital protocol functions in a single integrated circuit, resulting in significant space savings and improved reliability.

HOLT INC.
INTEGRATED CIRCUITS

ARINC 429

Holt Integrated Circuits has the largest ARINC 429 IC product portfolio in existence today. Holt's ARINC 429 ICs cover a whole range of complexity, from simple analog bus interface chips such as line receivers and line drivers, to protocol ICs with on-chip FIFOs or RAM. Holt's unique approach provides fully integrated solutions with both analog transceivers and digital protocol on one chip. The latest line of ARINC 429 terminal ICs are designed to operate from a single 3.3V supply and incorporate a host Serial Peripheral Interface (SPI).

New Released ARINC 429 Components:

HI-8597 3.3V Lightning Protected Line Driver DO-160G Level 3 with Tristate Outputs

MIL-STD-1553

Holt Integrated Circuits provides a broad range of IC options for the MIL-STD-1553 designer. The most highly integrated products provide full protocol and transceiver functionality on a single IC, along with BC/MT/RT, on-chip RAM and dedicated host interface options. Many of these products also have dedicated development kits and software, enabling a quick learning curve and faster design cycles for new users. In addition, Holt also provides a family of standalone transceivers and transformers which are compatible with a range of customer protocol solutions such as FPGAs and older discrete designs.

New Released MIL-STD-1553 Components:

HI-2579 3.3V Dual 1553 Transceiver with integrated Transformers
HI-2581 3.3V Dual 1553 Transceiver with integrated Transformers
HI-6140 3.3V BC / MT / RT with 32k x 16 RAM 16bit parallel Interface
HI-2130 BC / MT / 2RT with integrated Transformers

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Power Modules for Avionic:

TT electronics (Semelab) is also offering custom Power Modules for customers in the Avionic Industry. Most of our customers are facing the problem that the big Power Module companies are not interested into customizing the Power Modules for their needs. Semelab has done several different Power Module designs for Commercial and Military Applications where the total demand was below 1000 Units.

FPGA Obsolescence:

Protec GmbH is also working together with customers on obsolescence issues they are facing with FPGAs. These obsolete FPGAs can be converted to an ASIC with our Partner Aeroflex. Currently we are working on different FPGA to ASIC conversions where Aeroflex offers a quick solution for our customers without having to change their Board Designs. In most of the designs Aeroflex can offer Pin to Pin replacement and guarantee a long term supply for the components.

Memory Obsolescence:

Protec GmbH is also working with Partners which have replaced several different Obsolete Memories from Austin Semi / Micross or White / Microsemi for Avionic and Military Applications.

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ARINC 825 (CAN)

Holt has leveraged its expertise in providing mixed signal ARINC 429 and MIL-STD-1553 solutions and produced the first *ARINC* 825 compliant CAN controller with an integrated transceiver. All CAN devices are capable of interfacing with digital logic from 2.5V to 5V and operating in the temperature range -55°C to +125°C. Select transceiver products are capable of higher operating temperatures (up to 200°C). Additional attractive features include deep FIFOs, a flexible frame filtering scheme tailored to ARINC 825 applications, short-circuit survival to +/- 58V and the smallest footprint protocol/transceiver combination available.

Holt also offers Protocol Bridge ICs, allowing easy communication between ARINC 429 and ARINC 825 (CAN) buses. The HI-3200 can be programmed to automatically reformat, re-label, repacketize and retransmit data from ARINC 429 receive buses to ARINC 429 transmit buses, as well as from ARINC 429 to ARINC 825 (CAN) or the other way around.

All CAN Controllers have been independently validated according to protocol specification ISO 11898 and test specification ISO 16845 by C&S group, GmbH. The validation report is available on request.

New Released CAN Components:
HI-3000 CAN Transceiver
HI-3001 CAN Transceiver

ARINC 717

The HI-3717 is targeted at digital flight data recorder applications and may be used in the recorder itself, the data acquisition unit or the quick access recorder. The device communicates with an external microcontroller via a 4-wire Serial Peripheral host Interface (SPI) and provides Harvard Bi-Phase (HBP) and Bi-Polar Return-to-Zero (BPRZ) channels with encoders/decoders. Dedicated line drivers and line receivers allow direct connection to the ARINC 717 bus.

New Released ARINC 717 Components:
HI-3717 3,3V Arinc 717 Protocol IC