

# Protec GmbH

High-Rel Electronic Components

since 1976



## Italy Linecard

**RENESAS**  
intersil



**NX**  
NanoXplore

**SEMICOA**  
A DIVISION OF OSI OPTOELECTRONICS

 **TELEDYNE e2v**  
HIREL ELECTRONICS  
Everywhere you look™



 **APOGEE**  
SEMICONDUCTOR

 **XREL**  
SEMICONDUCTOR

 **SMC**

**VPT**  
COMPONENTS



Protec GmbH is specialized in the distribution of high quality products for the electronics industry, particularly for the Space, Avionic, High Voltage, High Temperature and Niche Industrial Markets.

We are supporting customers and manufacturers with our expertise in:

- EUS requirements and licensing processes
- CoC requirements
- Design in support
- Export classifications and rules
- Product trainings

Support and understanding of terms like SLDC, LOT acceptance, PIND, TID, ELDRS, SEE, SEU, SEL, Proton testing and many more industry specific terms.

## Protec GmbH - Italy Contacts



**Protec GmbH**  
High-Rel Electronic Components  
Rosenheimer Landstraße 117  
85521 Ottobrunn-Riemerling  
Germany

**Danilo Lauta**  
Regional Sales Manager Italy

Direct: +39 334 9529414  
Office Munich: +49 89 6692923  
d.lauta@protec-semi.com



www.protec-semi.com



**Protec GmbH**  
High-Rel Electronic Components  
Rosenheimer Landstraße 117  
D-85521 Ottobrunn-Riemerling  
Phone: +49 89 6602923

**Christian Mayer**  
General Manager

Direct: +49 89 660292-46  
c.mayer@protec-semi.com



www.protec-semi.com

## RENESAS intersil



- Analog** OpAmps, Temp. Sensor, ADC & DAC, Voltage References, Multiplexer, RS422, CAN Bus
- Power** LDOs, PoL, PWM, MosFet Driver, Supervisory, Linear Regulator, Source Driver
- Discrete** MosFETs
- Digital** PROM,  $\mu$ Controller
- RF** SP2T & more under development

## Low Power Rad Hard FPGAs

(for GEO, LEO, MEO and Constellations)



	kLUTs	RAM Mb	DSPs	HSSL	NanoXplore
<b>NG-medium</b>	34	3	122		
<b>NG-large</b>	137	10	384	24x 6Gbps	ARM Cortex R5
<b>NG-ultra</b>	537	32	1344	32x 12Gbps	4x ARM Cortex R52

Coming soon Military and Avionic versions



## SEMICOA

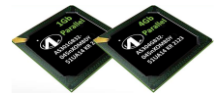
A DIVISION OF OSI OPTOELECTRONICS

- Transistors** RadHard & qualified to MIL-PRF-19500
- Diodes** Qualified to MIL-PRF-19500 UMC Package

## TELEDYNE e2v HIREL ELECTRONICS

Everywhereyoulook™

- ADCs and DACs** up to 12 GSps
- Digital** Processors, Memory, SiP
- RF components** DAS, Multiplier, Gain Blocks, Limiters, Mixers, PLL
- Dosimeters**



- MRAMs Parallel (75krad)** 16M, 32M, 64M, 1G, 4G
- MRAMs Serial (75krad)** 4M, 8M, 16M, 32M, 64M, 256M, 1G,
- nvDDR3 (75krad)** 4G and 8G



**Diodes for medical, avionic, Mil applications in all state of the art packages. TVS diodes, Schottky's, Rectifiers, Chips and more. SMC has its own Wafer Fab and offers additional screening or tests.**



**High-reliability diodes qualified to MIL-PRF-19500 slash sheets and offered in JAN, JANTX, JANTXV, and JANS quality levels.**



**Parts for High-temperature applications like Oil & Gas, Avionic & Military hot Areas like Engine control.**

**Operating Temp. Range beyond -60°C to 230°C**



**ESCC Qualified Magnetics Transformer, Coils, Chokes.....**



**RadHard Logic AND, NAND, OR, NOR, XOR, Inverter, Voter, Flip-Flop, Level Translator, Transceiver Available in RH plastic**

## ARQUIMEA

**ASICs & FPGA to ASIC**

**Analog, Digital and Mixed Signal**



**Space, Military, Avionic & Industrial / Commercial**

# Bare Die for Hybrids

**Protec GmbH**  
High-Rel Electronic Components



## Other Contacts

**Protec GmbH**  
Vertrieb elektronischer Bauteile  
Rosenheimer Landstraße 117  
D-85521 Ottobrunn-Riemerling  
Phone: +49 89 6602923  
Fax: +49 89 6098170

**Phil Abbott**  
Sales Manager Avionic & Space UK / Nordic  
Direct: +49 89 660292-45  
p.abbott@protec-semi.de      www.protec-semi.de

**Protec GmbH**  
High-Rel Electronic Components  
Rosenheimer Landstraße 117  
D-85521 Ottobrunn-Riemerling  
Phone: +49 89 6602923

**Simon Schiller**  
Sales Manager  
Direct: +49 89 660292-42  
s.schiller@protec-semi.de      www.protec-semi.de

**Protec GmbH**  
Vertrieb elektronischer Bauteile  
Rosenheimer Landstraße 117  
D-85521 Ottobrunn-Riemerling

**Hermann Lindbüchl**  
GM & Sales Manager  
Phone: +49 89 6602923  
Fax: +49 89 6098170  
h.lindbuechl@protec-semi.de      www.protec-semi.de

## Historical Brand Names of Suppliers

following Brands are still known, either sold or renamed, we might be able to help you

