

### EPC · SPACE

RadHard GaN HEMT

**Rad-Hard GaN Power Devices**  
Increase Power Density for Demanding Space Applications



**EPC7007B**  
200 V, 28 mΩ  
20 A, 22 mm<sup>2</sup>

**EPC7018G**  
100 V, 6 mΩ  
90 A, 45 mm<sup>2</sup>

EPC · SPACE

40V 4mΩ  
530A

100V 6mΩ  
90A

200V 28mΩ  
20A

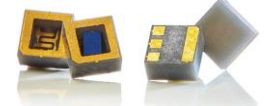
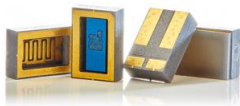
Superior Performance, Shorter Delivery Times, and **Lower Cost than Silicon**



**EPC7019G**  
Rad Hard GaN Power FETs  
40V, 4 mΩ, 530 A<sub>total</sub> Pulsed  
Total Dose = 1 Mrad  
SEE Immunity for LET at 85 MeV

### EPC · SPACE

Easy-to-Use Demonstration Boards



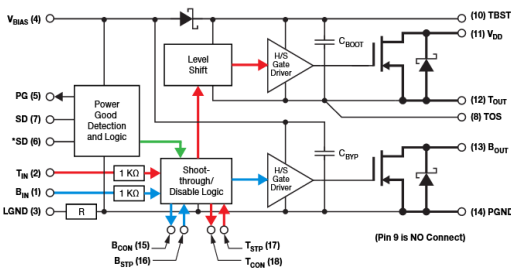
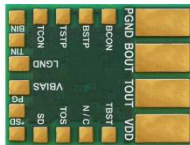
### EPC · SPACE

#### FBS-GAM02-P-R50

50 VDC / 10 A Radiation-Hardened Multifunction Power Module

Four Possible Configurations:

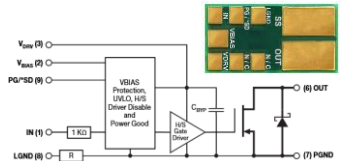
- Single Low-Side Gate Driver
- Single High-Side Gate Driver
- Independent Low- and High-Side Drivers
- Half-Bridge Gate Drivers with Input Shoot-through Protection



### EPC · SPACE

#### FBS-GAM01-P-R100

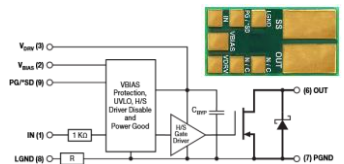
100 VDC / 12 A Radiation-Hardened Single Low-Side Power Driver Module



### EPC · SPACE

#### FBS-GAM01-P-R50

50 VDC / 12 A Radiation-Hardened Single Low-Side Power Driver Module



### RENESAS intersil

#### ISL70040SEH and ISL73040SEH

Low-side drivers to drive enhancement mode GaN FETs in isolated topologies and boost type configurations. Supply voltage from 4.5V to 13V.



Gate drive voltage of 4.5V ( $V_{DRV}$ ) generated using an internal regulator which prevents the gate voltage from exceeding the maximum gate-source rating of enhancement mode GaN FETs.

The ISL70040SEH and ISL73040SEH inputs can withstand voltages up to 14.7V regardless of the  $V_{DD}$  voltage. This allows the ISL70040SEH and ISL73040SEH inputs to be connected directly to most PWM controllers.

### 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