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SEMICONDUCTORS & DEVICES

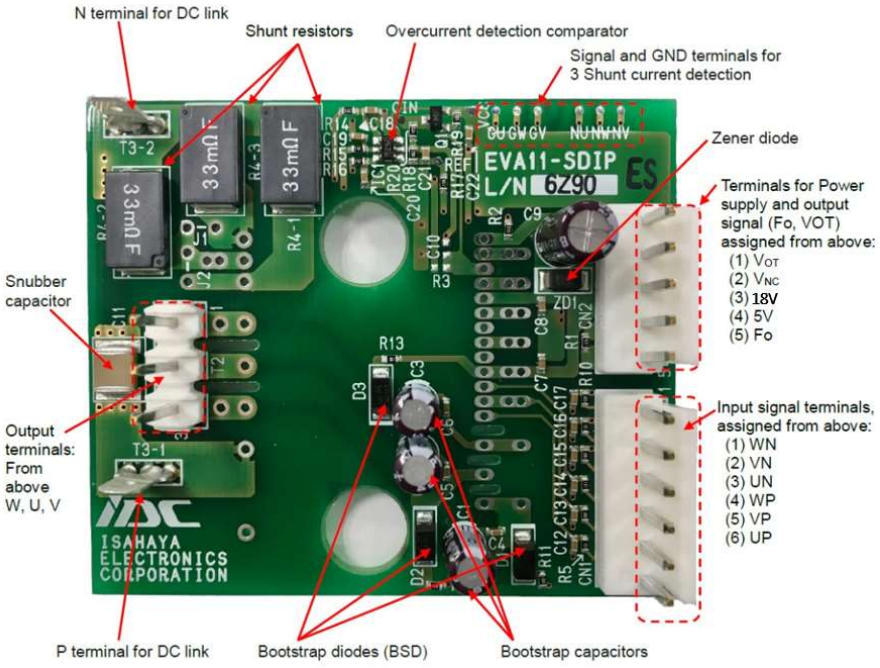
600V / 25A SiC DIPIPM Evaluation Kit
US-EVA-01

EVA11-SDIP with PSF25S92F6-A

The SiC DIPIPM Evaluation Kit includes the primary components of a 3-phase inverter motor drive which are necessary to evaluate the SiC DIPIPM with the user's own controller, motor, and DC link. Additional guidance can be found in the supporting documents below and enclosed in the kit. Further technical and sales support is available via the contact information below.

Hardware Included:

- 1-piece EVA11-SDIP SuperMini DIPIPM Evaluation Board
- 1-piece PSF25S92F6-A 25A/600V SiC DIPIPM

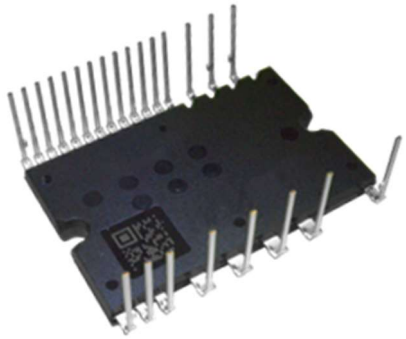


Supporting Documents:

- Instruction manual of the evaluation board (EVA11-SDIP) for SuperMini DIPIPM Series
- Datasheet for the PSF25S92F6-A
- SuperMini DIPIPM Ver.6 Series Application Note
- SiC SuperMini DIPIPM Series Application Note

Additional Hardware Required:

- Heatsink and mounting hardware for PSF25S92F6-A
- 5V and 15V Power Supplies for gate driver and control power
- Microcontroller for PWM control, fault feedback, temperature feedback
- DC link bulk capacitor and DC link power supply
- 3-phase motor



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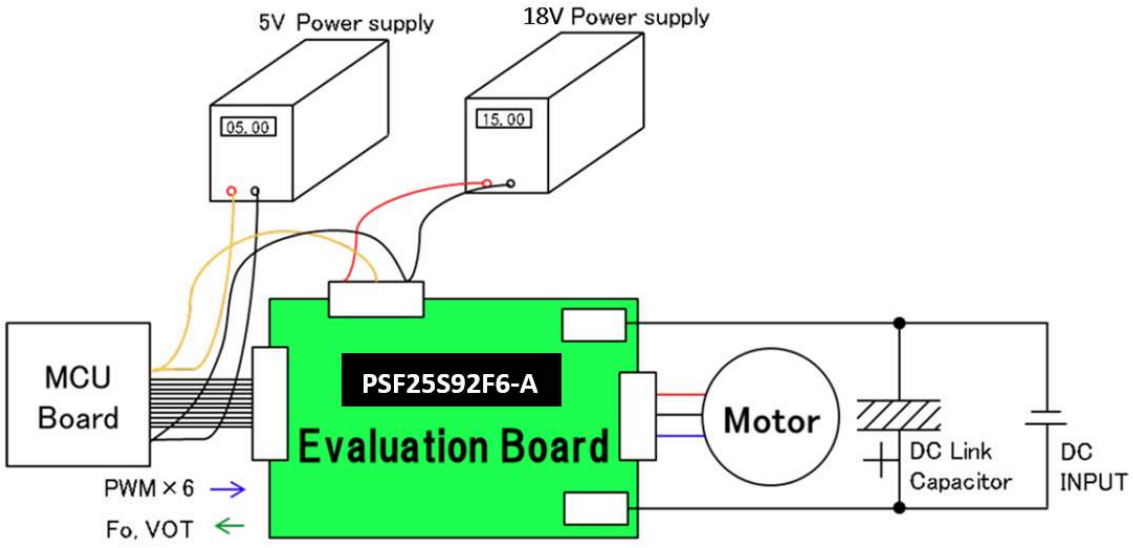
Quick Setup Instructions:

- Configure the EVA11-SDIP for the PSF25S92F6-A per the "EVA11-SDIP Evaluation Board Instruction Manual".
    - Shunt resistors on the eval board are already set to 12mohm each (x3) to provide SC protection at ~1.7x rated current of 25A.
    - D1, D2,D3 have already been removed from the eval board as these are included internal to PSF25S92F6-A
    - Use 18V control power instead of typical 15V for lower losses
- Solder PSF25S92F6-A to the PCB and then install a heatsink/thermal grease with sufficient capacity per the application conditions. Contact Mitsubishi Electric US Applications Engineers for power loss simulation assistance.
- Connect the peripheral components including the controller, power supplies, and motor to begin operation.



Contact information for additional support:

Mitsubishi Electric US, Inc. can provide additional technical and sales support. Please contact us via the link below or by email at: powerdev.support@meus.mea.com

https://meus-semiconductors.com/contact