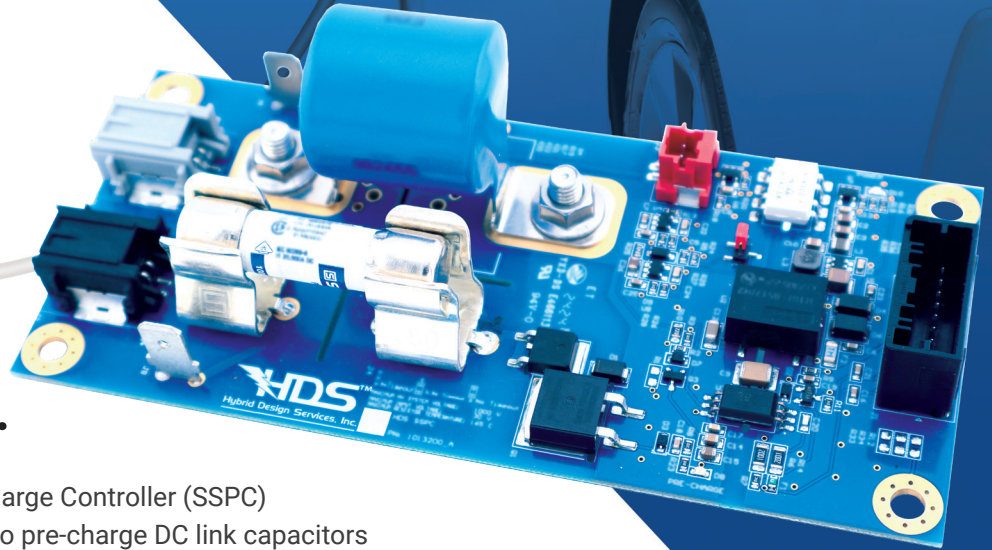




# High Voltage Solid-State Pre-Charge

## Robust Pre-Charge Solution for High Voltage Applications.



The HDS SSPC-1500-8A Solid State Pre-charge Controller (SSPC) introduces an innovative circuit designed to pre-charge DC link capacitors for high-voltage applications, such as Electric Vehicles and Hybrid Vehicles. This design operates without the need for a microcontroller and can function with a minimum 9V power supply. Additionally, the SSPC offers over-temperature lockout capability and provides real-time outputs for pre-charge temperature and fault conditions for host control.

### High Voltage, Reliable Solid State Pre-Charge Technology



#### Modular Resistor Options

Modular pre-charge resistor options to meet system requirements



#### Automatic Safety Lockouts

Automatic safety lockouts for hands-off operation



#### Rugged Construction

Rugged construction that meets Military shock and vibration standards.



#### Maintenance-Free Operation

Solid-state design eliminates mechanical parts, reducing maintenance needs and improving long-term performance.



Advanced Engineering  
& Manufacturing



Engineered & Assembled  
In The USA Since 2004.

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SCAN TO VISIT  
OUR WEBSITE

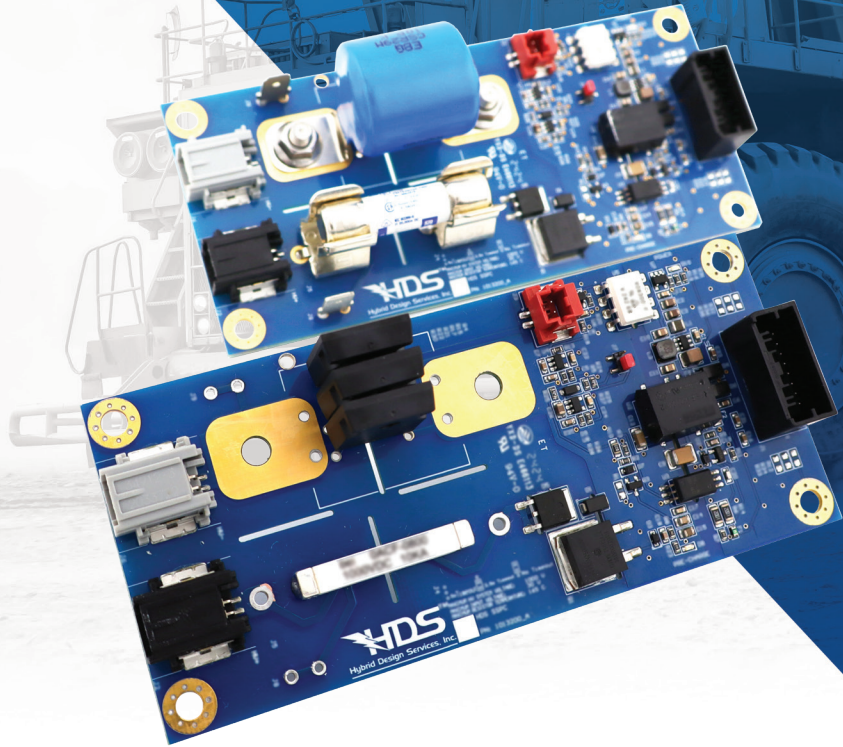
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# Reliable and Compact Power Management

## Advanced Solid State Pre-Charge Solutions

Protect your power systems with Solid State Pre-Charge, ensuring smooth, safe startups by managing inrush currents and protecting vital components in environments where performance matters most.



## Specifications

Engineered & Assembled  
In The USA Since 2004.



### PERFORMANCE

- Rated up to 1500Vdc
- 8A Peak Pre-charge Current
- With On-board Resistor:
  - Capable of Charging up to:
    - 470  $\mu$ F capacitor @ 1500V
    - 1000  $\mu$ F capacitor @ 800V
- Off-board Pre-charge Resistor Capable
- 12/24/48V Compatible Supply Input
- Real-time Analog Pre-charge Temp Output
- Fault Outputs for Host Control Read-Back
- Seamlessly Integrates with HDS CVT to Control Pre-charging

### SAFETY

- MIL STD 202G 213B Mechanical Shock
- MIL STD 810H 514.8 Random Vibration
- Spacing and Separation, EMC and Fire Resistant (as per UL)
- Over-temperature Lockout
- Configurable Pre-charge Lockout Time:
  - 5s (default), 2.5s, No Lockout

### ENVIRONMENTAL

- Operating Temp: -40°C to +105°C
- Conformal Coated

### ON BOARD RESISTOR OPTIONS

- 330 $\Omega$  @ 2950 Joules
  - 1k $\Omega$  @ 50 Joules
- Additional Customization Available

### PACKAGE

- Dimensions : (L) 5.2" [132 mm]
- (W) 2.4" [60 mm]
- (H) 1.4" [21 mm]

### APPLICATIONS

- Electric and Hybrid-Electric Vehicles
- Electric Aviation
- Electric Marine
- Industrial

Headquarters: Troy, MI | Manufacturing: Madison Heights, MI

For more Information: Contact [sales@hds.us](mailto:sales@hds.us)  
or Call +1.248.298.3400



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