

ANALOG SPOTLIGHT

UCS3205

5A, 22V Bidirectional Load Switch With Fast Role Swap

General Information

The UCS3205 is 5A, 22V load switch with Fast Role Swap (FRS) capability, bidirectional current capability, configurable overcurrent limiting, auto-recovery fault handling, overvoltage lockout, back-voltage protection, slew rate control, quick output discharge and a scaled analog output of the forward current passing through the switch.



Features

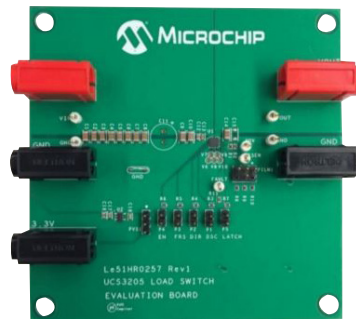
- Integrated N-channel load switch
- Fast role swap capability that meets the USB
- Power delivery specification requirements
- 2.85 to 22V bidirectional load switch input
- Voltage range (supply voltage can be V_{IN} or V_{OUT})
- 5A continuous current
- 30 m Ω typical on resistance
- Configurable current limit threshold with external resistor
- Scaled analog voltage output of current flowing through switch for external measurement
- Auto-recovery fault handling or latch mode
- Configurable overvoltage lockout
- Back-voltage protection
- Output voltage slew rate control
- Configurable quick output discharge
- Overtemperature protection (thermal shutdown)
- Packages: 19-lead 3 × 3 × 0.9 mm VQFN

Applications

- USB power delivery
- Power protections
 - Automotive
 - Consumer
 - Industrial

UCS3205 Evaluation Board

UCS3205 is a load switch that can support 22V and 5A continuous current operations. This board is designed for a user to evaluate the functions of the UCS3205 device.



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