

UCD9248 Programming

Texas Instruments - Fusion Digital Power Designer [System View]

File Tools Debug Help

Scan for Device (Device_ID | Device_Code | IC_Device_ID) Build System System Monitor Save Auto Write Start Polling

Power Rails Tree

| # | Addr | Rail # | Rail Name | Vout | On Delay | Rise | Off De... | Fall | Dependencies (Direct Only) |
|--|------|--------|-----------|------|----------|------|-----------|------|---|
| Device: UCD9248 @ PMBus Addr 52d (34h) / I2C Addr 104d (68h) [Offline] Click to configure device | | | | | | | | | |
| 1 | 34h | 1 | Rail #1 | 1.00 | 0.00 | 4.00 | 0.00 | 4.00 | VIN_ON @ 10.000 V, VIN_OFF @ 3.000 V; Stay On UCD9248 @ 52d Pin #52; Turn On Dependent on Rail #2; Stay On Dependent on Rail #2; Stay On Dependent... |
| 2 | 34h | 2 | Rail #2 | 1.00 | 0.00 | 4.00 | 0.00 | 4.00 | VIN_ON @ 10.000 V, VIN_OFF @ 3.000 V; Stay On UCD9248 @ 52d Pin #52; Stay On Dependent on Rail #1; Stay On Dependent on Rail #3; Stay On Dependent... |
| 3 | 34h | 3 | Rail #3 | 1.80 | 0.00 | 7.10 | 0.00 | 7.20 | VIN_ON @ 10.000 V, VIN_OFF @ 3.000 V; Turn On UCD9248 @ 52d Pin #52; Stay On UCD9248 @ 52d Pin #52; Stay On Dependent on Rail #1; Stay On Depend... |
| 4 | 34h | 4 | Rail #4 | 1.80 | 9.00 | 5.00 | 9.00 | 1.00 | VIN_ON @ 10.000 V, VIN_OFF @ 3.000 V; Turn On UCD9248 @ 52d Pin #52; Stay On UCD9248 @ 52d Pin #52; Stay On Dependent on Rail #1; Stay On Depend... |
| Device: UCD9248 @ PMBus Addr 53d (35h) / I2C Addr 106d (6Ah) [Offline] Click to configure device | | | | | | | | | |
| 5 | 35h | 1 | Rail #1 | 3.30 | 17.00 | 5.00 | 17.00 | 1.00 | VIN_ON @ 6.000 V, VIN_OFF @ 5.000 V; Stay On UCD9248 @ 53d Pin #41; Turn On UCD9248 @ 53d Pin #50; Stay On UCD9248 @ 53d Pin #50; Turn On Depen... |
| 6 | 35h | 2 | Rail #2 | 1.50 | 15.00 | 5.00 | 18.00 | 1.00 | VIN_ON @ 6.000 V, VIN_OFF @ 5.000 V; Stay On UCD9248 @ 53d Pin #41; Turn On UCD9248 @ 53d Pin #50; Stay On UCD9248 @ 53d Pin #50; Stay On Depen... |
| 7 | 35h | 3 | Rail #3 | 1.80 | 17.00 | 5.00 | 18.00 | 1.00 | VIN_ON @ 6.000 V, VIN_OFF @ 5.000 V; Stay On UCD9248 @ 53d Pin #41; Turn On UCD9248 @ 53d Pin #50; Stay On UCD9248 @ 53d Pin #50; Turn On Depen... |
| 8 | 35h | 4 | Rail #4 | 1.00 | 2.70 | 5.00 | 0.00 | 1.00 | VIN_ON @ 6.000 V, VIN_OFF @ 5.000 V; Turn On UCD9248 @ 53d Pin #41; Stay On UCD9248 @ 53d Pin #41; Stay On UCD9248 @ 53d Pin #50; Stay On Depen... |

Sequencing charts

Show: Soft Start Soft Stop Both Show rail labels

Tips & Hints PMBus Log

Fusion Digital Power Designer v7.1.17.Beta | UCD9248_system_file.tfsp

TEXAS INSTRUMENTS | fusion digital power

Open Fusion digital power designer, the Fusion should find two UCD9248.
Click to Configure device to program any UCD9248

Configure

Copy Rail/Design

Vout Max: 1.600 V

Over Fault: 1.150 V 15.0 %

Over Warn: 1.100 V 10.0 %

Margin High: 1.050 V 5.0 %

Vout: 1.000 V Synchronize margins/limits/ PG to Vout

Margin Low: 0.950 V -5.0 %

Under Warn: 0.900 V -10.0 %

Under Fault: 0.850 V -15.0 %

Power Good On: 0.900 V -10.0 %

Power Good Off: 0.850 V -15.0 %

Vout Exponent: -12 Max: 4.000 V Set for me

How to turn rail On/Off

On/Off Config: 0x00 (Always Converting)

Turn On Timing

Turn On Delay: 0.0 ms

Rise Time: 4.0 ms

Max Turn On: 20.0 ms No limit

Turn Off Timing

Turn Off Delay: 0.0 ms

Time: 4.0 ms

Max Turn Off: ∞ ms No limit

Fault Responses

TON MAX...

OV Response

UV Response

UC Response

OC Response

OT Response

Voltage Tracking

Voltage Tracking

No tracking

Track a rail: Rail #2

Track the external vtrack pin

[Configure vtrack source](#)

Tracking Scale: 1.000

Fault Shutdown Slaves

Rail #1: N/A

Rail #2: Do not shutdown on rail #1 fault

Rail #3: Do not shutdown on rail #1 fault

Rail #4: Do not shutdown on rail #1 fault

Sequencing Dependencies

Turn On Dependencies

Rail #1 Pin 52

Rail #2 Pin 49

Rail #3

Rail #4

[Edit Input Pins](#)

Stay On Dependencies

Rail #1 Pin 52

Rail #2 Pin 49

Rail #3

Rail #4

[Edit Input Pins](#)

Stay On Initiated Shutdown Mode

Configure how a rail shuts down when stay on condition is no longer met:

Soft off: TOFF_DELAY and TOFF_FALL are used

Click File->"Save project as" to save the programming to .xml file
 Click File->"import to device" to import the .xml file.