Hardware Configuration(1)

Rails & Enables — 10 of 12 Assigned

	Rail Name	Voltage	Temperature	Current	Enable	Enable Name	Trim/Margin PWM	Actions
#1	P12V_MON	Pin 1 MON1	<Click to Assign>	<Click to Assign>	<Click to Assign>	EN #1	<Click to Assign>	Delete Configure
#2	P3V3_MON	Pin 2 MON2	<Click to Assign>	<Click to Assign>	Pin 13 GPIO3	P3V3_EN	Pin 23 FPWM7_GPIO11	Delete Configure
#3	P0V88_AVS_MON	Pin 3 MON3	<Click to Assign>	<Click to Assign>	Pin 30 GPIO15	P0V88_EN	<Click to Assign>	Delete Configure
#4	P0V8_MON	Pin 4 MON4	Pin 52 MON11	<Click to Assign>	Pin 33 GPIO16	P0V8_MAC_EN	Pin 18 FPWM2_GPIO6	Delete Configure
#5	P1V2_MON	Pin 5 MON5	<Click to Assign>	<Click to Assign>	Pin 25 GPIO13	P1V2_EN	Pin 19 FPWM3_GPIO7	Delete Configure
#6	P2V5_MON	Pin 6 MON6	<Click to Assign>	<Click to Assign>	<Click to Assign>	EN #6	Pin 17 FPWM1_GPIO5	Delete Configure
#7	P1V8_MON	Pin 59 MON7	<Click to Assign>	<Click to Assign>	Pin 12 GPIO2	P1V8_EN	Pin 21 FPWM5_GPIO9	Delete Configure
#8	P1V88_MON	Pin 62 MON8	<Click to Assign>	<Click to Assign>	Pin 29 DBG_GPIO14	P1V88_EN	Pin 22 FPWM6_GPIO10	Delete Configure
#9	P5V_MON	Pin 63 MON9	<Click to Assign>	<Click to Assign>	<Click to Assign>	EN #9	Pin 20 FPWM4_GPIO8	Delete Configure
#10	ADP_current_MON	<Click to Assign>	<Click to Assign>	Pin 50 MON10	<Click to Assign>	EN #10	<None>	Delete Configure

Add Rail

Rail #7 Voltage Monitor Type

Voltage monitor type:

- (•) Standard
- ( ) Hardware Comparator (N/A)

The response time to an over/under voltage fault is faster with the hardware comparator. The hardware comparator option is only available with up to six monitored voltages. There is no glitch filtering when using the hardware comparator.

You can not use either of the "continue to operate" or "retries"of voltage fault responses (OVF , UVF, Ton Max Fault responses) with a hardware comparator Voltage monitor.

→ Monitor type: grey background
Is it normal???

Rail #7 Enable Pin Configuration

Polarity:
- ( ) Active Low
- (•) Active High

Output Mode:
- (•) Actively Driven
- ( ) Open-Drain

Note: Polarity defines output voltage level when the logic evaluation result is TRUE(active). In open-drain mode, High-level output means the output pin is in Hi-Z state; a pull-up resistor is required to make the output level High.

→ Enable pin:

Rail #7 Trim/Margining

PWM Config:

Duty Cycle: 25 %

Frequency: 1.750000 MHz

Frequency can be 15.275 kHz to 125 MHz

Margin Mode:

- (•) Tri-State
  When not margining, the PWM pin is tri-stated.
- ( ) Active Trim
  When not margining, the PWM duty-cycle is continuously adjusted to keep the voltage at VOUT_COMMAND.
- ( ) Active Duty Cycle
  When not margining, the PWM duty-cycle is set to a fixed duty-cycle.

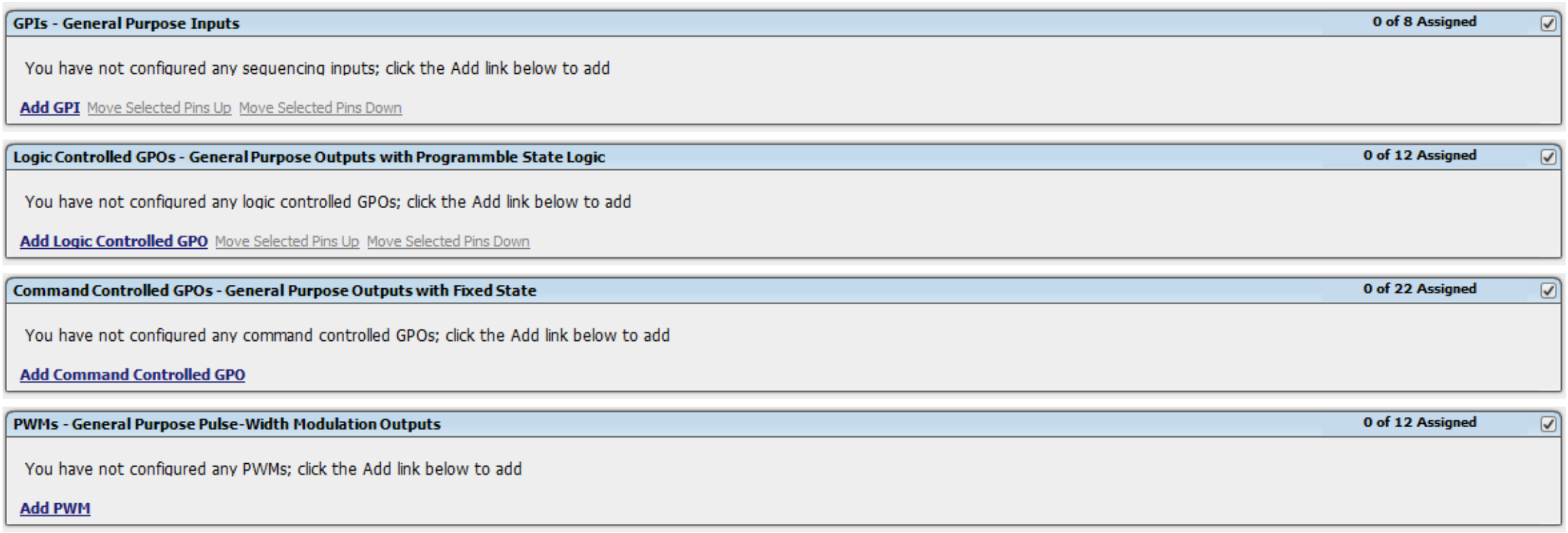
[ ] Ignore faults
When margining is enabled with a pin, this determines if faults (over-voltage and under-voltage) are ignored or not.

[x] Increase Duty Cycle increases Voltage
When margining, this determines if increasing duty cycle will increase or decrease voltage

→ Trim/ Margin:
Cal by Excel from TI
Settings are suitable???

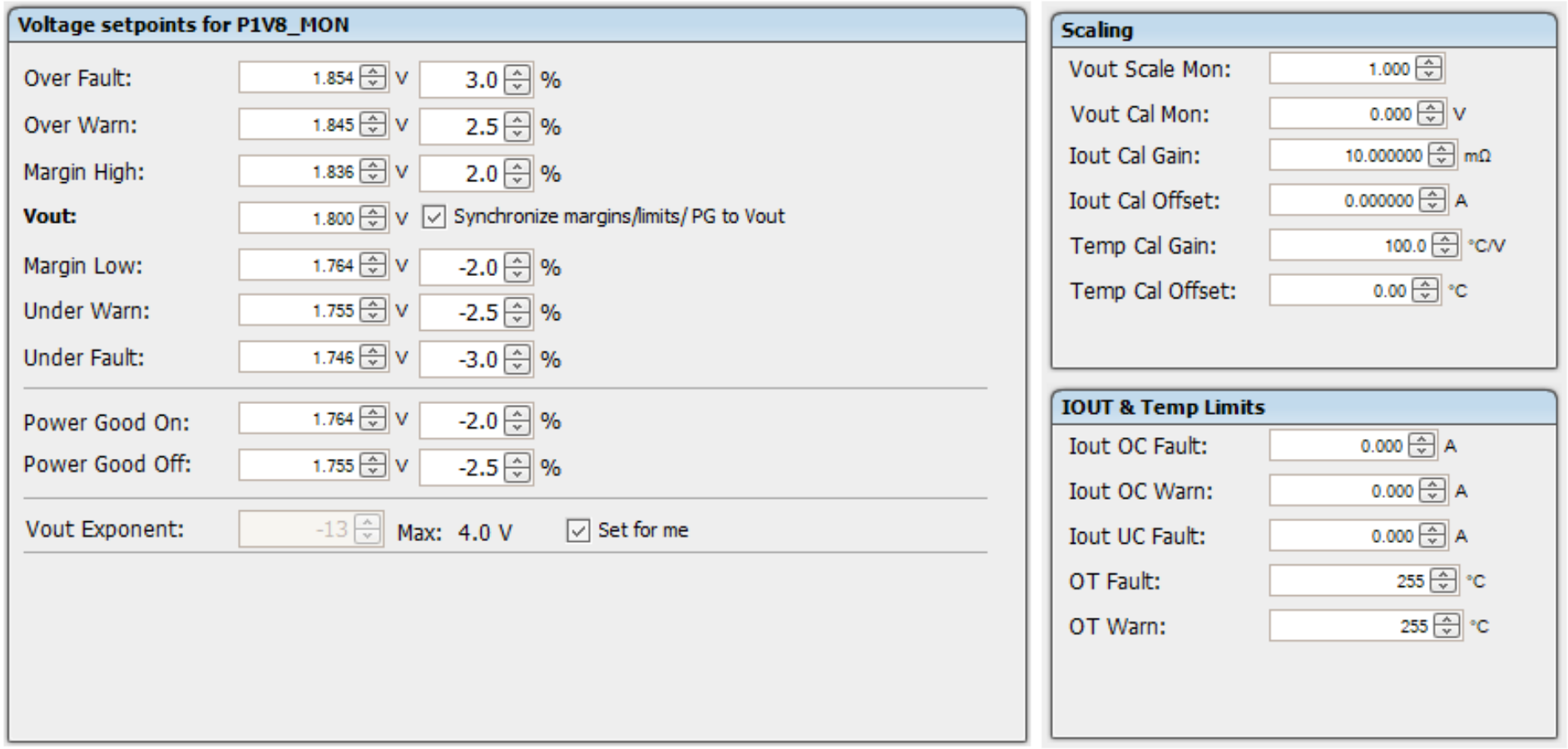
Hardware Configuration(2)

No more GPI and GPO(logic combination used)

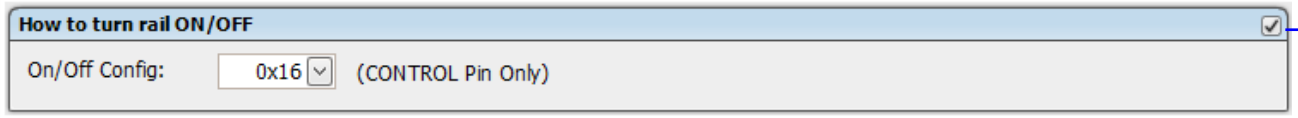


Rail Configuration(1)

No more GPI and GPO(logic combination used)

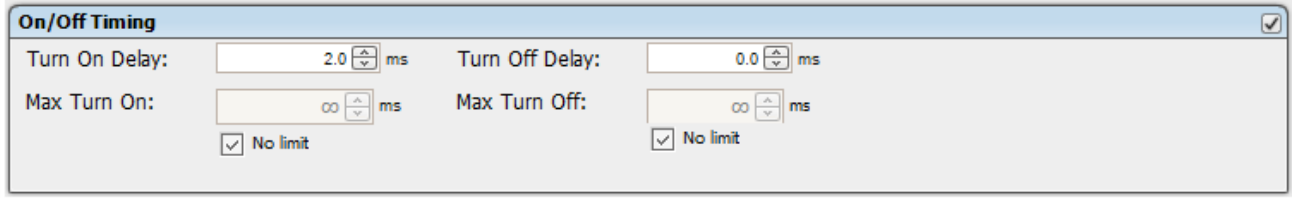


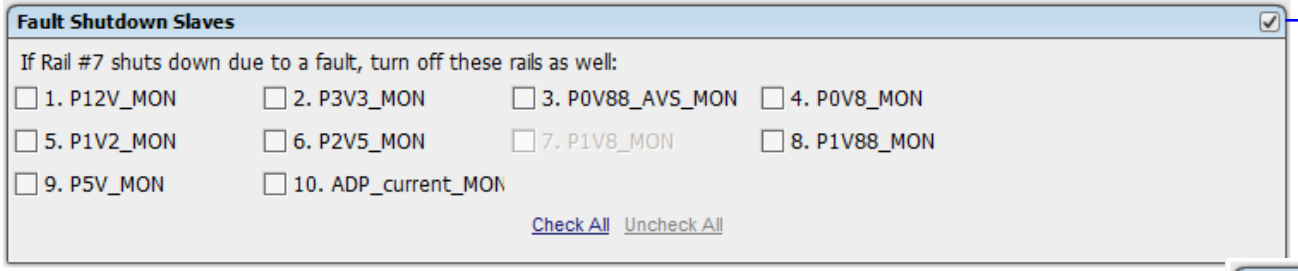
Rail Configuration(2)



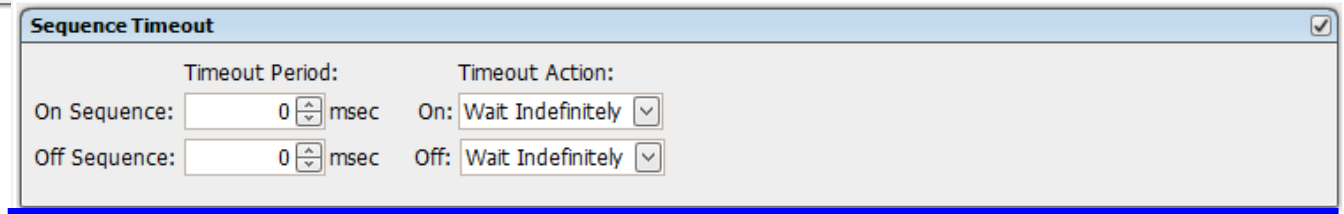
Rail turn on by CONTROL Pin only

PS: I don’t understand the “operation cmd” usage

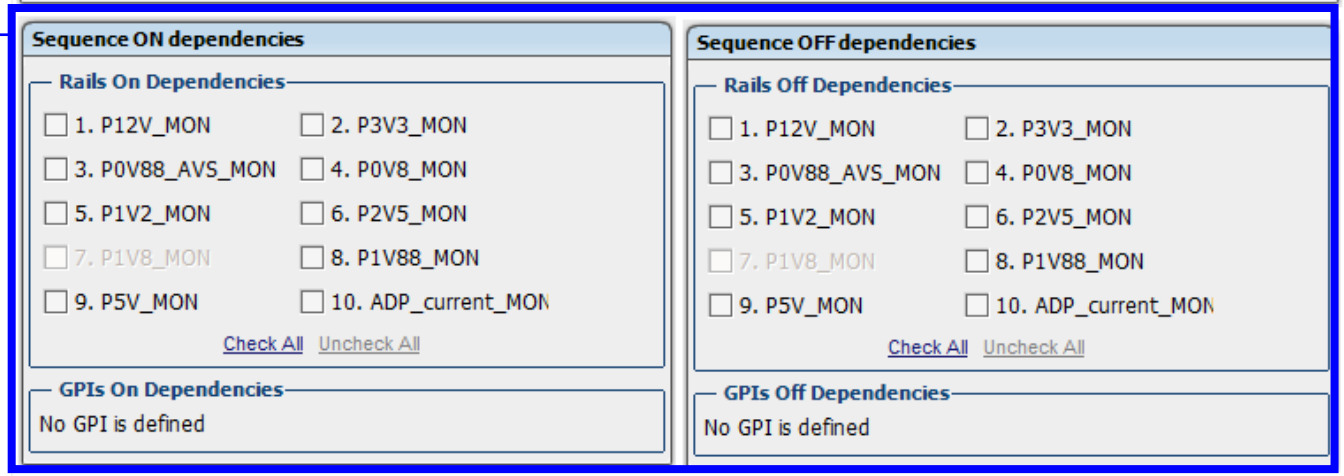




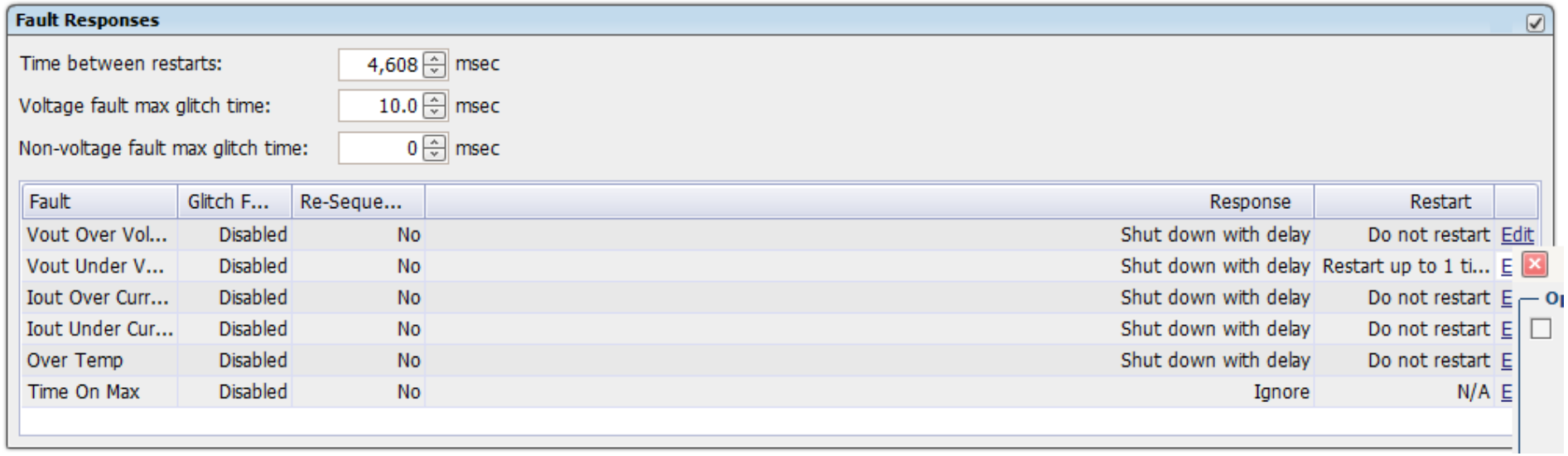
No more fault shutdown slaves requirements for now

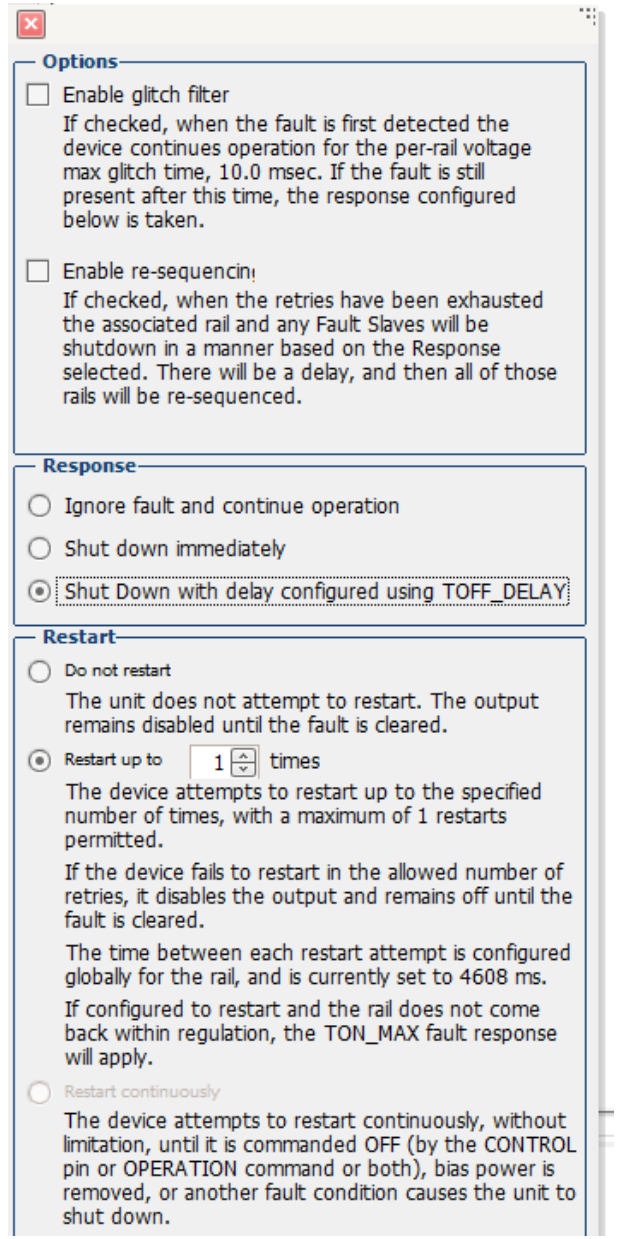


Don’t understand the “dependencies” usage



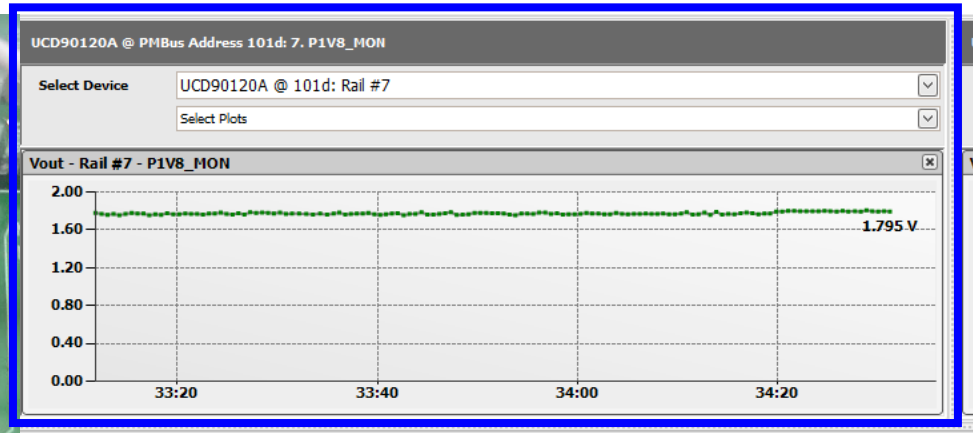
Rail Configuration(3)

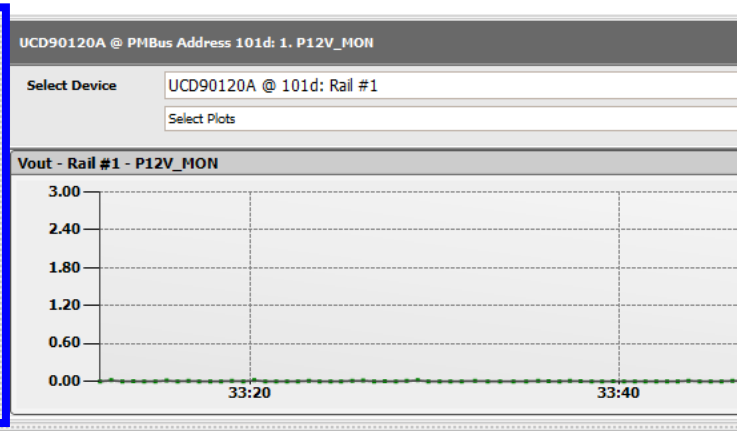




For now, Vout Under Voltage is configured

There is 1.8V for MON





#	Add...	Rail #	Rail Name	Vout	Iout	Temp	On Off Config	Operation ...	Margining	Rail_State	EN pin	Rail Status	Fault	Warn	U...
UCD90120A @ PMBus Address 101d															
1	65h	1	P12V_MON	0.000	0.000	28.000	Ctrl Pin	Off	None	N/A					
2	65h	2	P3V3_MON	0.017	0.000	28.000	Ctrl Pin	Off	None	N/A					
3	65h	3	P0V88_AVS_MON	0.000	0.000	28.000	Ctrl Pin	Off	None	N/A					
4	65h	4	P0V8_MON	0.017	0.000	16.000	Ctrl Pin	Off	None	N/A					
5	65h	5	P1V2_MON	0.000	0.000	28.000	Ctrl Pin	Off	None	N/A					
6	65h	6	P2V5_MON	0.000	0.000	28.000	Ctrl Pin	Off	None	N/A					
7	65h	7	P1V8_MON	1.795	0.000	28.000	Ctrl Pin	Off	None; Act on Fault	N/A				UVW	
8	65h	8	P1V88_MON	0.000	0.000	28.000	Ctrl Pin	Off	None	N/A					
9	65h	9	P5V_MON	0.012	0.000	28.000	Ctrl Pin	Off	None	N/A					
10	65h	10	ADP_current_MON	0.000	16.190	28.000	Ctrl Pin	Off	None	N/A			OCF	OCW	

But why fault alert

Rails & Enables — 10 of 12 Assigned

	Rail Name	Voltage	Temperature	Current	Enable	Enable Name	Trim/Margin PWM	Actions
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#2	P3V3_MON	Pin 2 MON2	<Click to Assign>	<Click to Assign>	Pin 13 GPIO3	P3V3_EN	Pin 23 FPWM7 GPIO11	Delete Configure
#3	P0V88_AVS_MON	Pin 3 MON3	<Click to Assign>	<Click to Assign>	Pin 30 GPIO15	P0V88_EN	<Click to Assign>	Delete Configure
#4	P0V8_MON	Pin 4 MON4	Pin 52 MON11	<Click to Assign>	Pin 33 GPIO16	P0V8_MAC_EN	Pin 18 FPWM2 GPIO6	Delete Configure
#5	P1V2_MON	Pin 5 MON5	<Click to Assign>	<Click to Assign>	Pin 25 GPIO13	P1V2_EN	Pin 19 FPWM3 GPIO7	Delete Configure
#6	P2V5_MON	Pin 6 MON6	<Click to Assign>	<Click to Assign>	<Click to Assign>	EN #6	Pin 17 FPWM1 GPIO5	Delete Configure
#7	P1V8_MON	Pin 59 MON7	<Click to Assign>	<Click to Assign>	Pin 12 GPIO2	P1V8_EN	Pin 21 FPWM5 GPIO9	Delete Configure
#8	P1V88_MON	Pin 62 MON8	<Click to Assign>	<Click to Assign>	Pin 29 DBG GPIO14	P1V88_EN	Pin 22 FPWM6 GPIO10	Delete Configure
#9	P5V_MON	Pin 63 MON9	<Click to Assign>	<Click to Assign>	<Click to Assign>	EN #9	Pin 20 FPWM4 GPIO8	Delete Configure
#10	ADP_current_MON	<Click to Assign>	<Click to Assign>	Pin 50 MON10	<Click to Assign>	EN #10	<None>	Delete Configure

Add Rail

1.8V setting so far