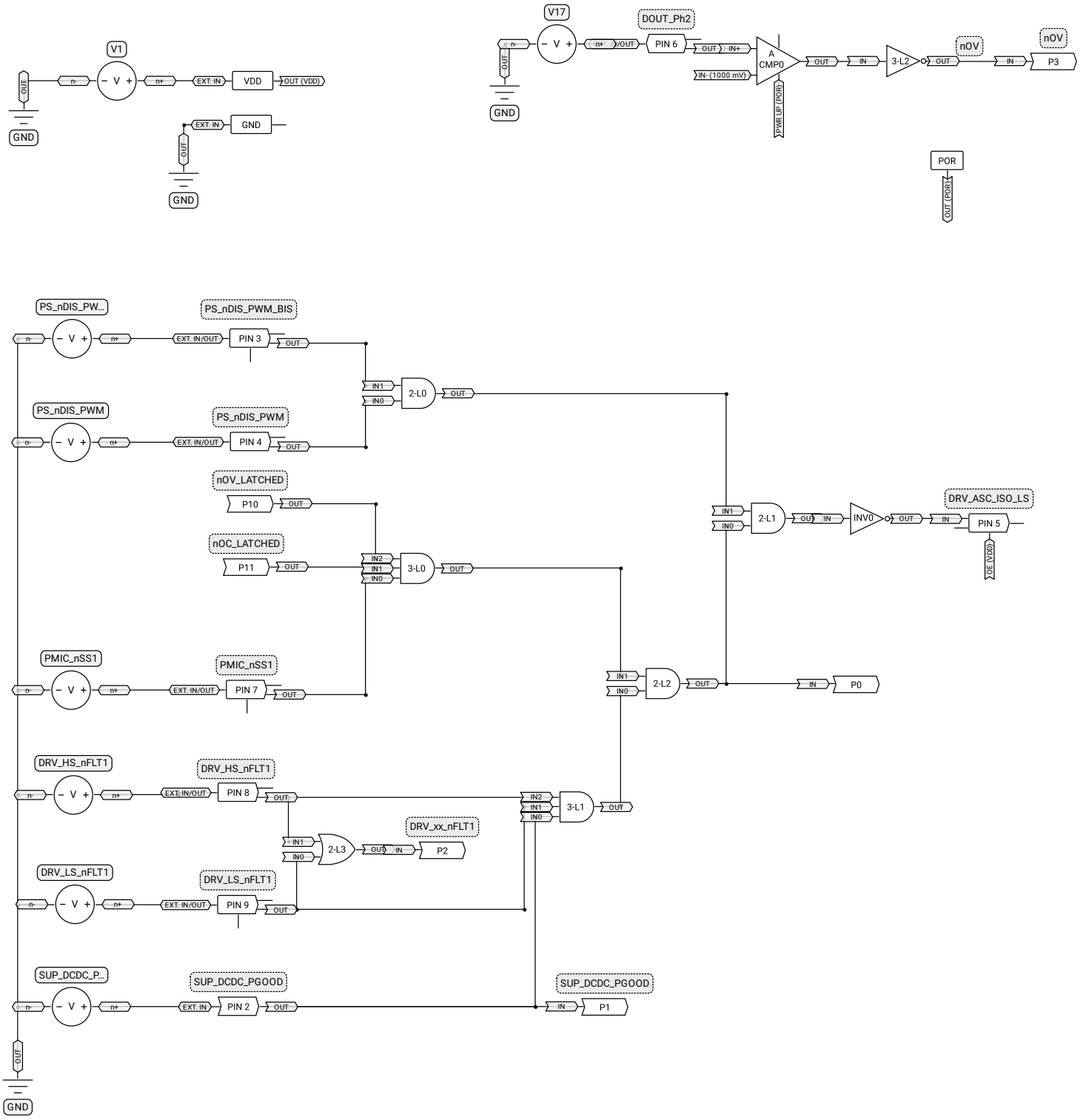
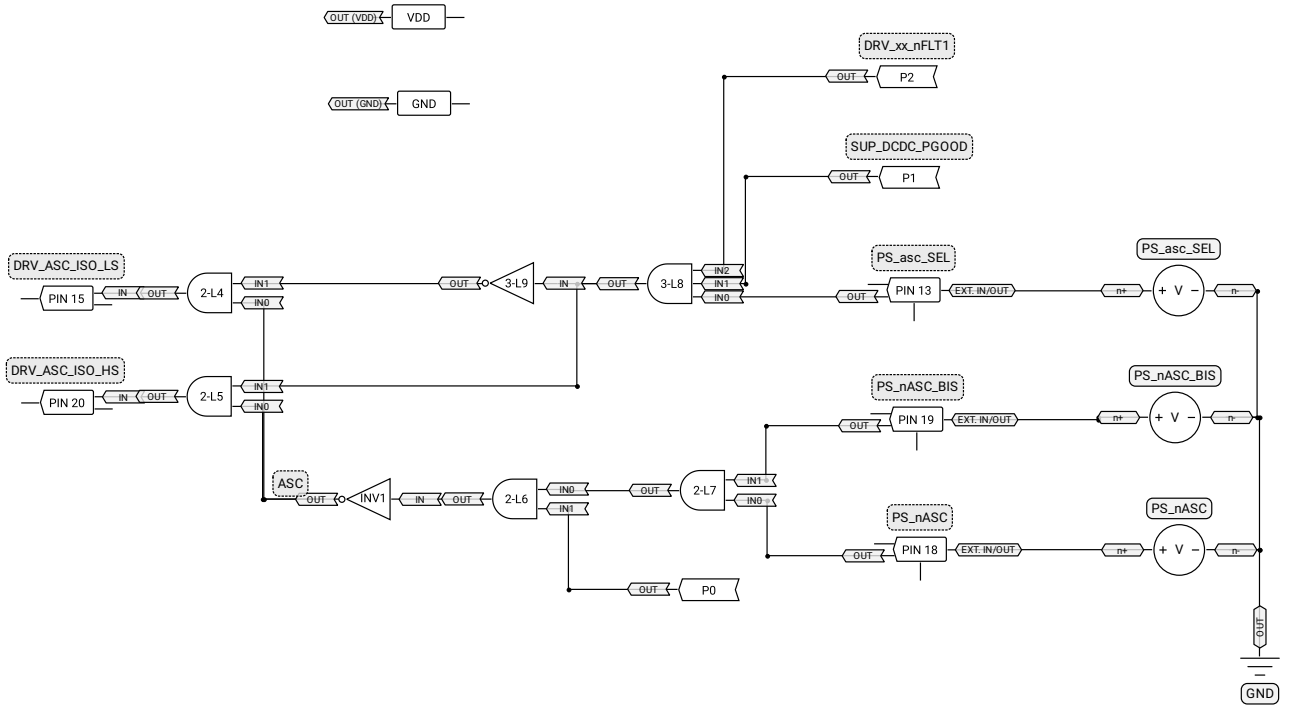
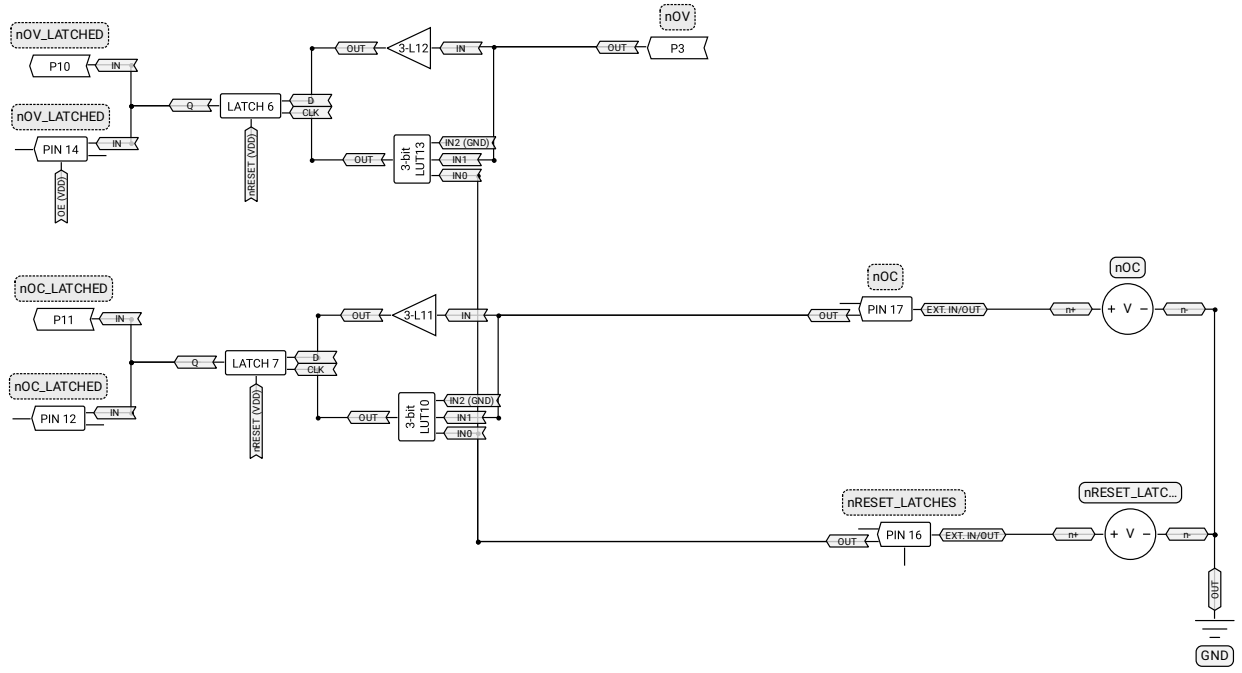
Matrix 0


V1
OUT
n-
V
n+
EXT. IN
VDD
OUT (VDD)
GND
V17
DOUT_Ph2
PIN 6
IN+
IN- (1000 mV)
A CMP0
PWR UP (POR)
3-L2
nOV
P3
POR
OUT (POR)
PS_nDIS_PW...
PS_nDIS_PWM_BIS
EXT. IN/OUT
PIN 3
2-L0
IN1
IN0
PS_nDIS_PWM
PIN 4
nOV_LATCHED
P10
nOC_LATCHED
P11
3-L0
IN2
2-L1
INV0
DRV_ASC_ISO_LS
PIN 5
OE (VDD)
PMIC_nSS1
PIN 7
2-L2
P0
DRV_HS_nFLT1
PIN 8
3-L1
DRV_xx_nFLT1
2-L3
P2
DRV_LS_nFLT1
PIN 9
SUP_DCDC_P...
SUP_DCDC_PGOOD
PIN 2
P1

Matrix 1


OUT (VDD)
VDD
OUT (GND)
GND
DRV_xx_nFLT1
P2
SUP_DCDC_PGOOD
P1
DRV_ASC_ISO_LS
PIN 15
2-L4
3-L9
3-L8
PS_asc_SEL
PIN 13
EXT. IN/OUT
DRV_ASC_ISO_HS
PIN 20
2-L5
PS_nASC_BIS
PIN 19
ASC
INV1
2-L6
2-L7
PS_nASC
PIN 18
P0
GND


nOV_LATCHED
P10
nOV_LATCHED
PIN 14
LATCH 6
3-L12
nOV
P3
3-bit LUT13
nOC_LATCHED
P11
nOC_LATCHED
PIN 12
LATCH 7
3-L11
nOC
PIN 17
3-bit LUT10
nRESET_LATCHES
PIN 16
nRESET_LATC...
GND

Matrix 0

VDD (PIN 1)

Property	*Value*
Min. value (V)	1.71
Typ. value (V)	3.30
Max. value (V)	5.00

PIN 2
Label: "SUP_DCDC_PGOOD"

Property	*Value*
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Up
Resistor value	10K
Reset mode	Disable

PIN 3
Label: "PS_nDIS_PWM_BIS"

Property	*Value*
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Down
Resistor value	1M

PIN 4
Label: "PS_nDIS_PWM"

Property	*Value*
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Down
Resistor value	1M

PIN 5
Label: "DRV_ASC_ISO_LS"

Property	*Value*
I/O selection	Digital output
In mode	None
Out mode	1x push pull

PIN 6
Label: "DOUT_Ph2"

Property	*Value*
I/O selection	Analog input/output
In mode	Analog input/output
Out mode	Analog input/output
Resistor	Floating

PIN 7
Label: "PMIC_nSS1"

Property	*Value*
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Up
Resistor value	10K

PIN 8
Label: "DRV_HS_nFLT1"

Property	*Value*
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Up
Resistor value	10K

PIN 9
Label: "DRV_LS_nFLT1"

Property	*Value*
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Up
Resistor value	10K

2-bit LUT0

IN1	*IN0*	*OUT*
0	0	0
0	1	0
1	0	0
1	1	1

Property	*Value*
Standard gates	AND

2-bit LUT1

IN1	*IN0*	*OUT*
0	0	0
0	1	0
1	0	0
1	1	1

Property	*Value*
Standard gates	AND

2-bit LUT2

IN1	*IN0*	*OUT*
0	0	0
0	1	0
1	0	0
1	1	1

Property	*Value*
Standard gates	AND

2-bit LUT3

IN1	*IN0*	*OUT*
0	0	0
0	1	1
1	0	1
1	1	1

Property	*Value*
Standard gates	OR

3-bit LUT0

IN2	*IN1*	*IN0*	*OUT*
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

Property	*Value*
Standard gates	AND

3-bit LUT1

IN2	*IN1*	*IN0*	*OUT*
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

Property	*Value*
Standard gates	AND

3-bit LUT2

IN	*OUT*
0	1
1	0

Property	*Value*
Standard gates	Inverter

A CMP0

Property	*Value*
Hysteresis	Disable
Buffer bandwidth	1 kHz
Input current source	Disable
IN+ gain	Disable
IN+ source	PIN 6
IN- source	1000 mV

POR

Property	*Value*
Chip power on delay	4 us

P1 (out)
Label: "SUP_DCDC_PGOOD"

P2 (out)
Label: "DRV_xx_nFLT1"

P3 (out)
Label: "nOV"

P10 (in)
Label: "nOV_LATCHED"

P11 (in)
Label: "nOC_LATCHED"

Matrix 1

VDD (PIN 1)

Property	Value
Min. value (V)	1.71
Typ. value (V)	3.30
Max. value (V)	5.00

PIN 12
Label: "nOC_LATCHED"

Property	Value
I/O selection	Digital output
In mode	None
Out mode	1x push pull

PIN 13
Label: "PS_asc_SEL"

Property	Value
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Down
Resistor value	1M

PIN 14
Label: "nOV_LATCHED"

Property	Value
I/O selection	Digital output
In mode	None
Out mode	1x push pull

PIN 15
Label: "DRV_ASC_ISO_LS"

Property	Value
I/O selection	Digital output
In mode	None
Out mode	1x open drain PMOS
Resistor	Pull Down
Resistor value	10K

PIN 16
Label: "nRESET_LATCHES "

Property	Value
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Down
Resistor value	1M

PIN 17
Label: "nOC"

Property	Value
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Down
Resistor value	1M

PIN 18
Label: "PS_nASC"

Property	Value
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Down
Resistor value	1M

PIN 19
Label: "PS_nASC_BIS"

Property	Value
I/O selection	Digital input
In mode	Digital in without Schmitt trigger
Out mode	None
Resistor	Pull Down
Resistor value	1M

PIN 20
Label: "DRV_ASC_ISO_HS"

Property	Value
I/O selection	Digital output
In mode	None
Out mode	1x open drain PMOS
Resistor	Pull Down
Resistor value	10K

2-bit LUT4

IN1	IN0	OUT
0	0	0
0	1	0
1	0	0
1	1	1

Property	Value
Standard gates	AND

2-bit LUT5

IN1	IN0	OUT
0	0	0
0	1	0
1	0	0
1	1	1

Property	Value
Standard gates	AND

2-bit LUT6

IN1	IN0	OUT
0	0	0
0	1	0
1	0	0
1	1	1

Property	Value
Standard gates	AND

2-bit LUT7

IN1	IN0	OUT
0	0	0
0	1	0
1	0	0
1	1	1

Property	Value
Standard gates	AND

3-bit LUT8

IN2	IN1	IN0	OUT
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

Property	Value
Standard gates	AND

3-bit LUT9

IN	OUT
0	1
1	0

Property	Value
Standard gates	Inverter

3-bit LUT10

IN2	IN1	IN0	OUT
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

Property	Value
Standard gates	Defined by user

3-bit LUT11

IN	OUT
0	0
1	1

Property	Value
Standard gates	Buffer

3-bit LUT12

IN	OUT
0	0
1	1

Property	Value
Standard gates	Buffer

3-bit LUT13

IN2	IN1	IN0	OUT
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

Property	Value
Standard gates	Defined by user

DFF/LATCH6

Property	Value
Mode	LATCH
nSET/nRESET option	nRESET
Initial polarity	Low
Q output polarity	Non-inverted (Q)

DFF/LATCH7

Property	Value
Mode	LATCH
nSET/nRESET option	nRESET
Initial polarity	Low
Q output polarity	Non-inverted (Q)

P1 (in)
Label: "SUP_DCDC_PGOOD"

P2 (in)
Label: "DRV_xx_nFLT1"

P3 (in)
Label: "nOV"

P10 (out)
Label: "nOV_LATCHED"

P11 (out)
Label: "nOC_LATCHED"

External Components

V1

Property	*Value*
Element	Voltage Source
Internal capacitance	100nF
Internal resistance	10Ohm
Type	DC
DC Voltage	5V

PS_nDIS_PWM_BIS

Property	*Value*
Element	Voltage Source
Type	DC
DC Voltage	3.3V

PS_nDIS_PWM

Property	*Value*
Element	Voltage Source
Type	DC
DC Voltage	3.3V

PMIC_nSS1

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	3.3V
Umin	0V
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

PMIC_nSS1 Pattern Points

Duration	*Voltage*
500µs	3.3V
500µs	3.3V
500µs	0V
500µs	0V
500µs	0V
500µs	3.3V
500µs	0V
500µs	3.3V
500µs	0V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V

DRV_HS_nFLT1

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	3.3V
Umin	0V
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

DRV_HS_nFLT1 Pattern Points

Duration	*Voltage*
500µs	3.3V
500µs	0V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	0V
500µs	3.3V
500µs	0V
500µs	3.3V

DRV_LS_nFLT1

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	3.3V
Umin	0V
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

DRV_LS_nFLT1 Pattern Points

Duration	*Voltage*
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	3.3V
500µs	0V
500µs	3.3V
500µs	0V

SUP_DCDC_PGOOD

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	3.3V
Umin	0V
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

SUP_DCDC_PGOOD Pattern Points

Duration	*Voltage*
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	0V
500µs	0V

PS_asc_SEL

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	5V
Umin	0V
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

PS_asc_SEL Pattern Points

Duration	*Voltage*
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V

PS_asc_SEL Pattern Points

Duration	*Voltage*
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V

PS_nASC_BIS

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	5V
Umin	0V

PS_nASC_BIS

Property	*Value*
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

PS_nASC_BIS Pattern Points

Duration	*Voltage*
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V

PS_nASC_BIS Pattern Points

Duration	*Voltage*
500µs	0V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V

PS_nASC

Property	*Value*
Element	Voltage Source

PS_nASC

Property	*Value*
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	5V
Umin	0V
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

PS_nASC Pattern Points

Duration	*Voltage*
500µs	5V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	5V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	5V
500µs	5V
500µs	5V
500µs	5V

nOC

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	3.3V
Umin	0V
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

nOC Pattern Points

Duration	*Voltage*
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V

nOC Pattern Points

Duration	*Voltage*
500µs	0V
500µs	0V
500µs	0V
500µs	0V

nRESET_LATCHES

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Internal capacitance	100nF
Internal resistance	10Ohm
Repeat state	Cyclic
Pre-start state	Low
Type	Logic pattern
Mode	Normal
Umax	3.3V
Umin	0V
Levels adjustment	Standard
Rise time	1µs
Fall time	1µs

nRESET_LATCHES Pattern Points

Duration	*Voltage*
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	3.3V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V
500µs	0V

V17

Property	*Value*
Element	Voltage Source
Pre-start delay	0s
Repeat state	Cyclic
Pre-start state	Low
Type	Trapeze
Mode	Normal
Umin	0V
Umax	3.3V
T low	5ms
T rising	5ms
T high	5ms
T falling	5ms

Project Specs			
	Min.	*Typ.*	*Max.*
VDD	1.71	3.30	5.00
Temperature (°C):	-40.00	25.00	125.00

General Settings	
Power Supply Control mode	Regulator always ON and Charge Pump is automatically ON/OFF (use for dynamic 1.71V < VDD < 5.0V)
GPIO quick charge	Disable
Pattern ID	1
Lock status	Unlocked