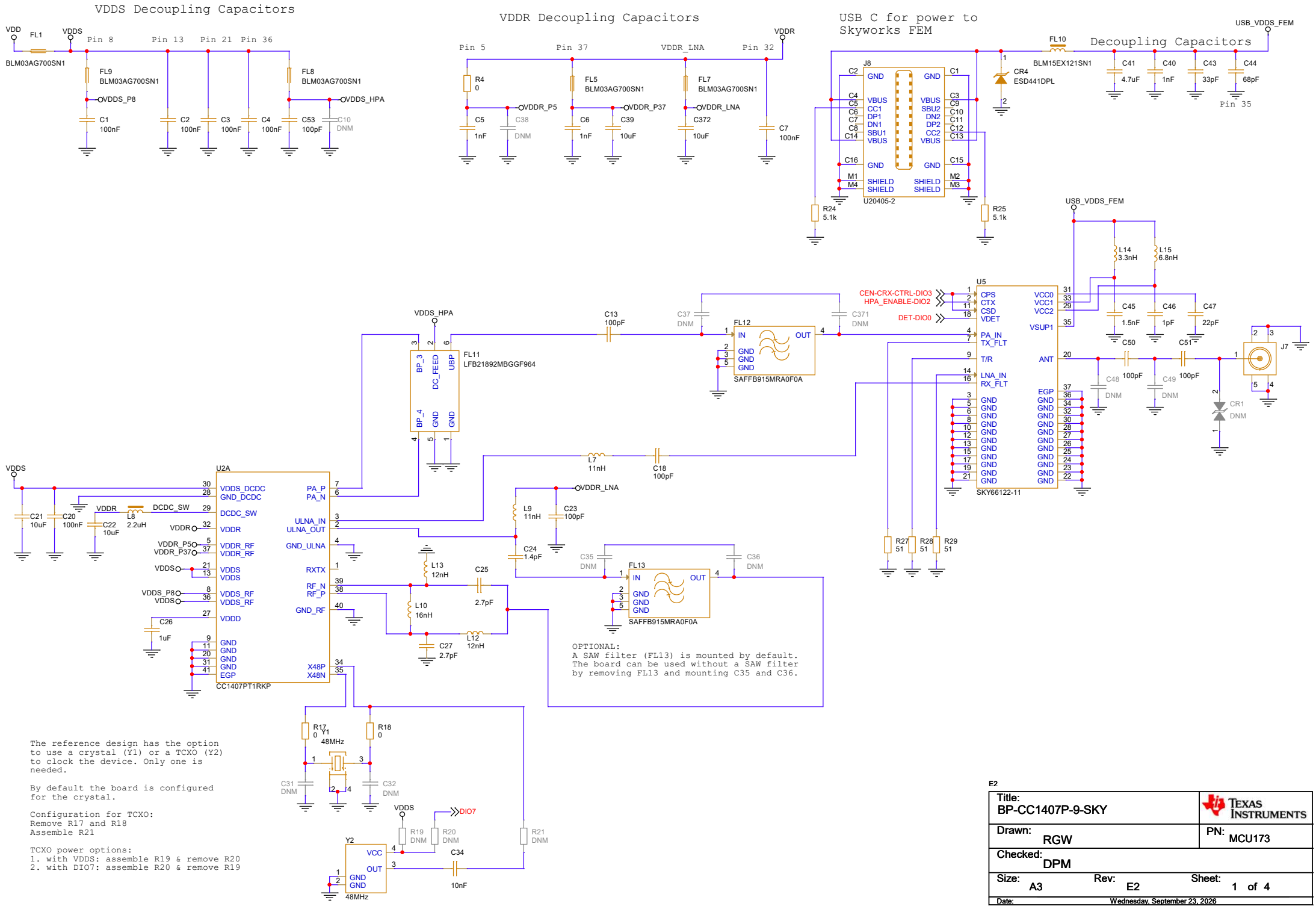
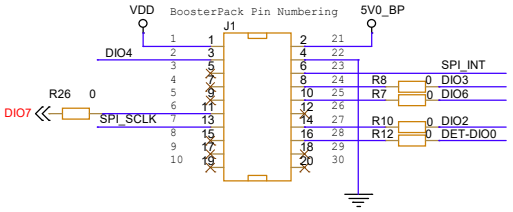
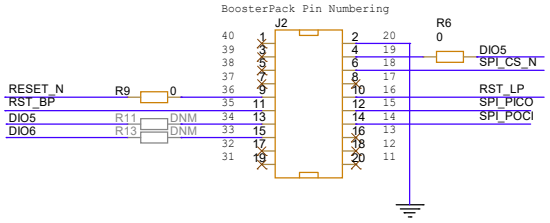
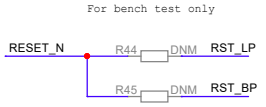
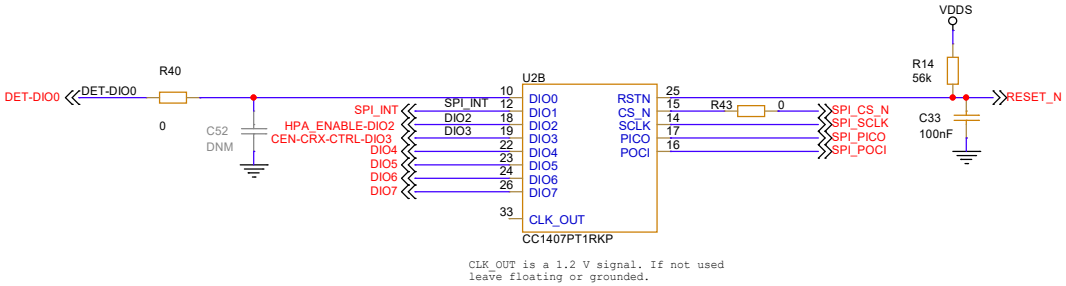

VDDS Decoupling Capacitors
VDD
FL1
VDDS
BLM03AG700SN1
Pin 8
Pin 13
Pin 21
Pin 36
FL9
BLM03AG700SN1
FL8
BLM03AG700SN1
VDDS_P8
VDDS_HPA
C1
100nF
C2
100nF
C3
100nF
C4
100nF
C53
100pF
C10
DNM
VDDR Decoupling Capacitors
VDDR
Pin 5
Pin 37
VDDR_LNA
Pin 32
R4
0
FL5
BLM03AG700SN1
FL7
BLM03AG700SN1
VDDR_P5
VDDR_P37
VDDR_LNA
C5
1nF
C38
DNM
C6
1nF
C39
10uF
C372
10uF
C7
100nF
USB C for power to
Skyworks FEM
USB_VDDS_FEM
FL10
BLM15EX121SN1
Decoupling Capacitors
C41
4.7uF
C40
1nF
C43
33pF
C44
68pF
Pin 35
J8
GND
VBUS
CC1
DP1
DN1
SBU1
SBU2
DN2
DP2
CC2
SHIELD
CR4
ESD441DPL
U20405-2
R24
5.1k
R25
5.1k
FL11
LFB21892MBGGF964
BP_3
DC_FEED
UBP
BP_4
GND
VDDS_HPA
C13
100pF
C37
DNM
FL12
IN
OUT
SAFFB915MRA0F0A
C371
DNM
U5
CEN-CRX-CTRL-DIO3
HPA_ENABLE-DIO2
DET-DIO0
CPS
CTX
CSD
VDET
PA_IN
TX_FLT
T/R
LNA_IN
RX_FLT
VCC0
VCC1
VCC2
VSUP1
ANT
EGP
SKY66122-11
L14
3.3nH
L15
6.8nH
C45
1.5nF
C46
1pF
C47
22pF
C50
C51
C48
100pF
DNM
C49
100pF
DNM
J7
CR1
DNM
L7
11nH
C18
100pF
VDDS
U2A
C21
10uF
C20
100nF
C22
10uF
VDDR
L8
2.2uH
DCDC_SW
VDDS_DCDC
GND_DCDC
DCDC_SW
VDDR
VDDR_RF
VDDS
VDDS_RF
VDDD
GND
EGP
PA_P
PA_N
ULNA_IN
ULNA_OUT
GND_ULNA
RXTX
RF_N
RF_P
GND_RF
X48P
X48N
CC1407PT1RKP
C26
1uF
VDDR_LNA
L9
11nH
C23
100pF
C24
1.4pF
L13
12nH
C25
2.7pF
L10
16nH
L12
12nH
C27
2.7pF
C35
DNM
C36
DNM
FL13
SAFFB915MRA0F0A
R27
51
R28
51
R29
51
OPTIONAL:
A SAW filter (FL13) is mounted by default.
The board can be used without a SAW filter
by removing FL13 and mounting C35 and C36.
R17
0
Y1
48MHz
R18
0
C31
DNM
C32
DNM
VDDS
DIO7
R19
DNM
R20
DNM
R21
DNM
Y2
VCC
OUT
GND
48MHz
C34
10nF
The reference design has the option
to use a crystal (Y1) or a TCXO (Y2)
to clock the device. Only one is
needed.
By default the board is configured
for the crystal.
Configuration for TCXO:
Remove R17 and R18
Assemble R21
TCXO power options:
1. with VDDS: assemble R19 & remove R20
2. with DIO7: assemble R20 & remove R19
E2
Title:
BP-CC1407P-9-SKY
Drawn:
RGW
Checked:
DPM
Size:
A3
Rev:
E2
Sheet:
1 of 4
Date:
Wednesday, September 23, 2026
PN:
MCU173
TEXAS INSTRUMENTS

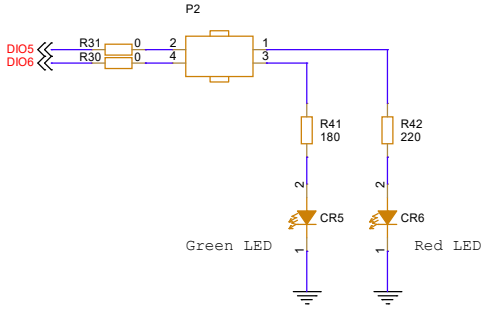
BoosterPack Headers and Peripherals







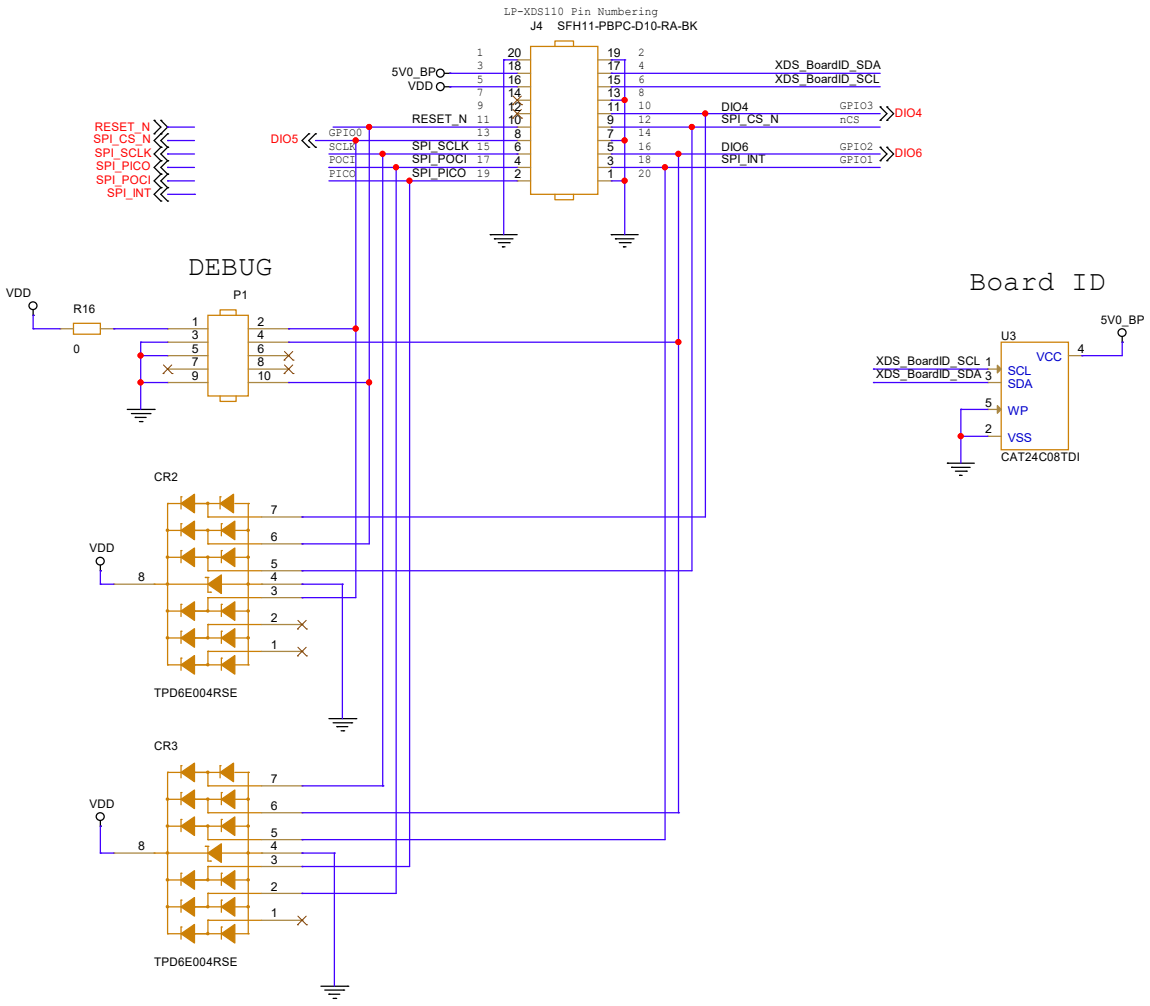




E2

Title: BP-CC1407P-9-SKY	Texas Instruments
Drawn: RGW	PN: MCU173
Checked: DPM	
Size: A3 Rev: E2 Sheet: 2 of 4	
Date: Wednesday, September 23, 2026	

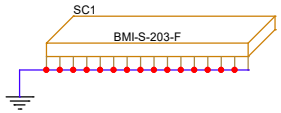
Debug connector



E2

Title: BP-CC1407P-9-SKY	Texas Instruments
Drawn: RGW	PN: MCU173
Checked: DPM	
Size: A3 Rev: E2 Sheet: 3 of 4	
Date: Wednesday, September 23, 2026	

Mechanical



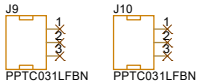




Jumpers for P2 LED headers

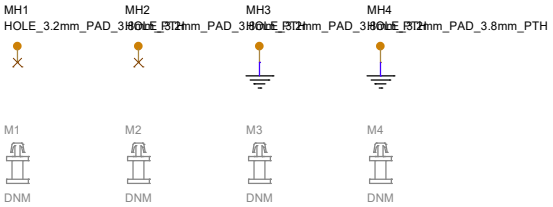


For alignment with LaunchPads





Mounting Holes



Labels

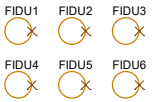








Fiducials



E2

Title: BP-CC1407P-9-SKY	TEXAS INSTRUMENTS
Drawn: RGW	PN: MCU173
Checked: DPM	
Size: A3 Rev: E2 Sheet: 4 of 4	
Date: Wednesday, September 23, 2026	