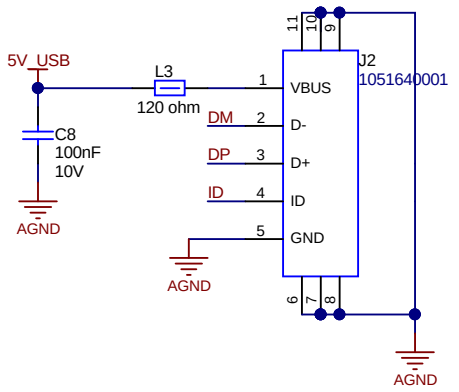
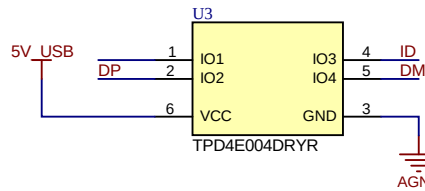


FTDI

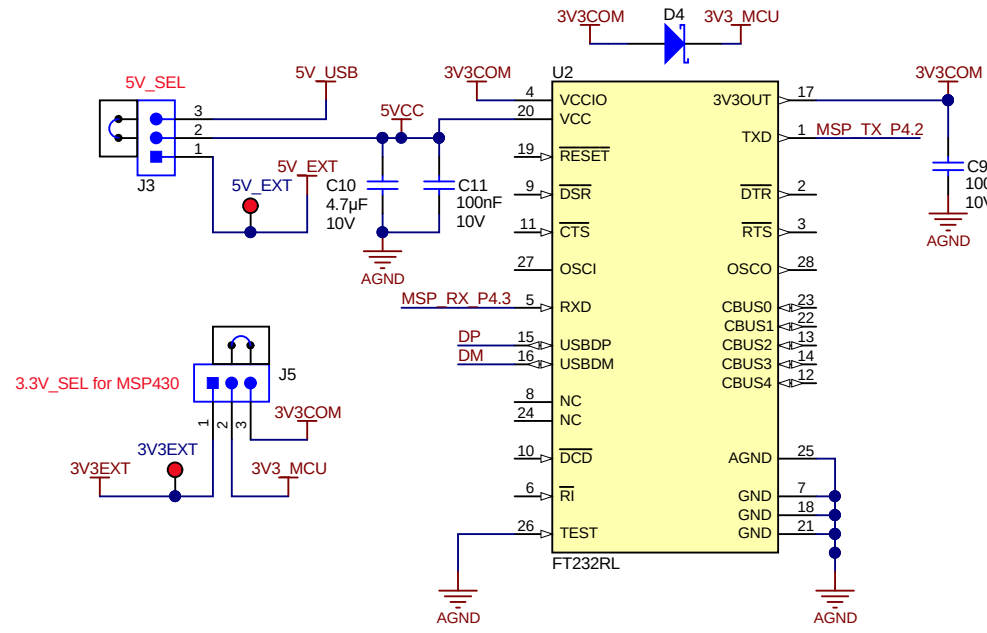
Micro USB Connector



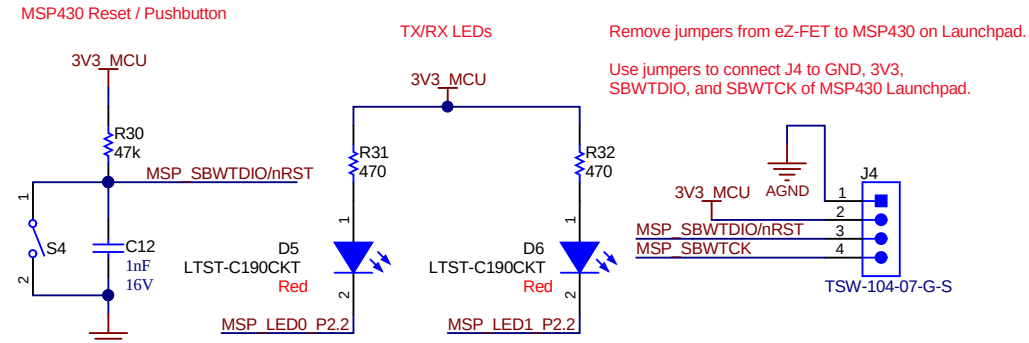
USB ESD Protection



FTDI REGULATOR



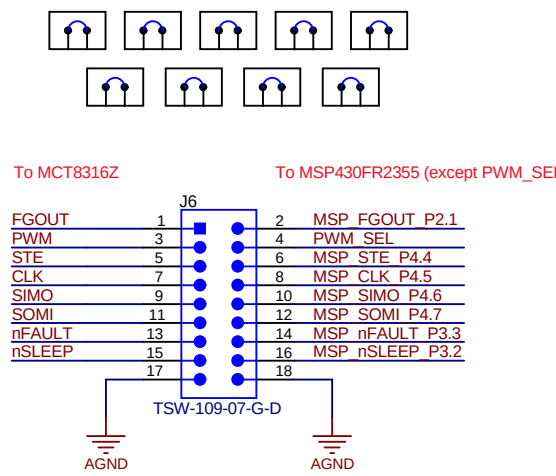
MCU PROGRAMMING



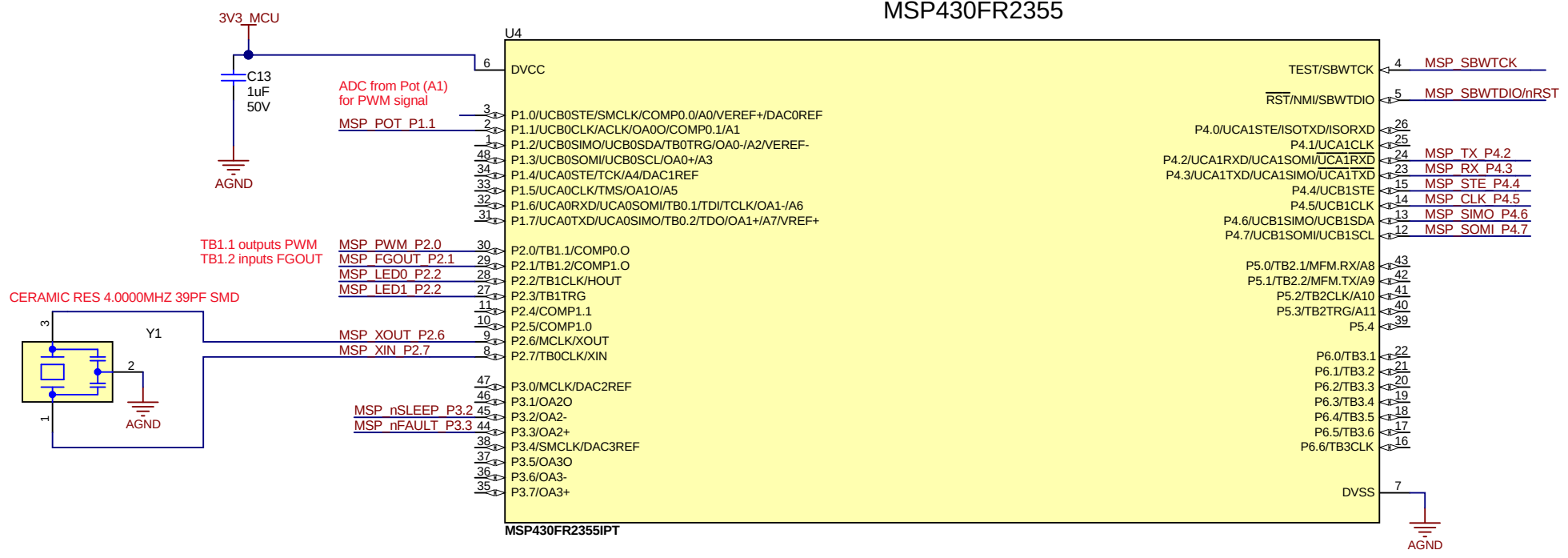
MSP430FR2355IPT

MSP430FR2355

Signal Bank for connecting MSP430 + MCT8316Z

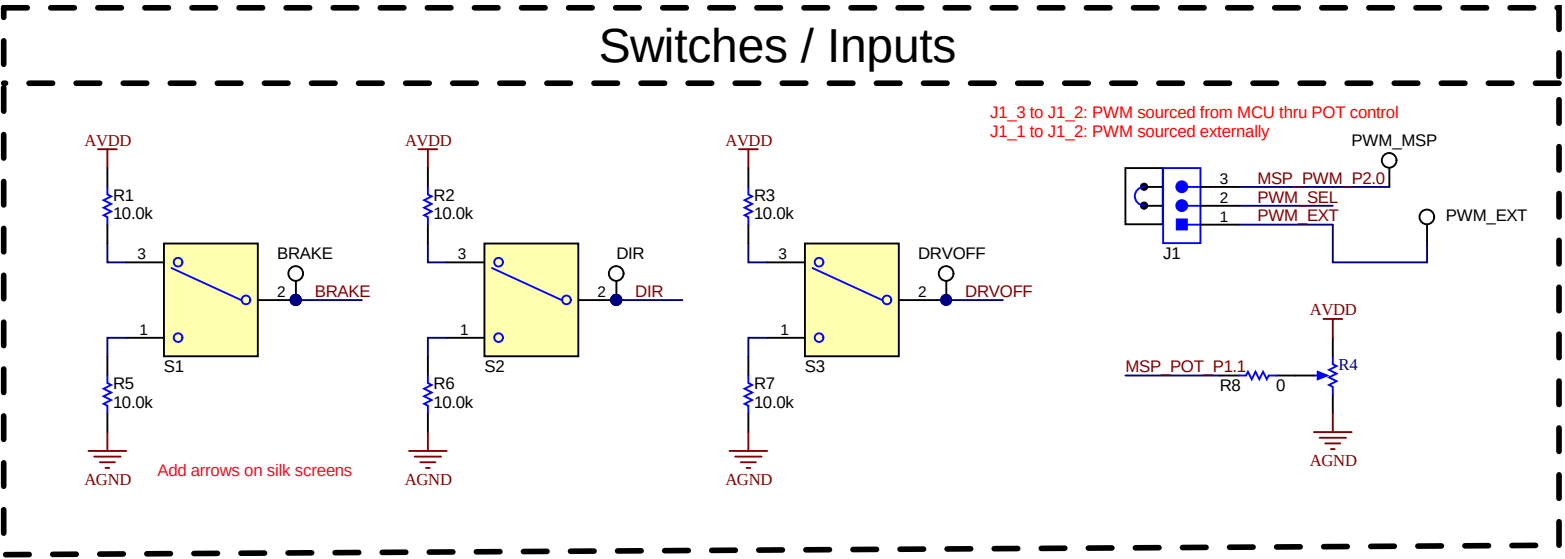


Populate jumpers to communicate onboard MSP430FR2355 to the MCT8316Z or depopulate jumpers to use standalone MSP430 or MCT8316Z.



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Orderable: MCT8316ZTEVM	Designed for: Public Release	Mod. Date: 1/15/2021
TID #: N/A	Project Title: MCT8316ZTEVM	
Number: MD042	Rev: A	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 1 of 5
Drawn By:	File: MD042A_INTERFACE.SchDoc	Size: B
Engineer: Aaron Barrera	Contact: http://www.ti.com/support	http://www.ti.com
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Orderable: MCT8316ZTEVM	Designed for: Public Release	Mod. Date: 1/15/2021
TID #: N/A	Project Title: MCT8316ZTEVM	
Number: MD042	Rev: A	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 2 of 5
Drawn By:	File: MD042A_CONTROL.SchDoc	Size: B
Engineer: Aaron Barrera	Contact: http://www.ti.com/support	

A

B

C

D

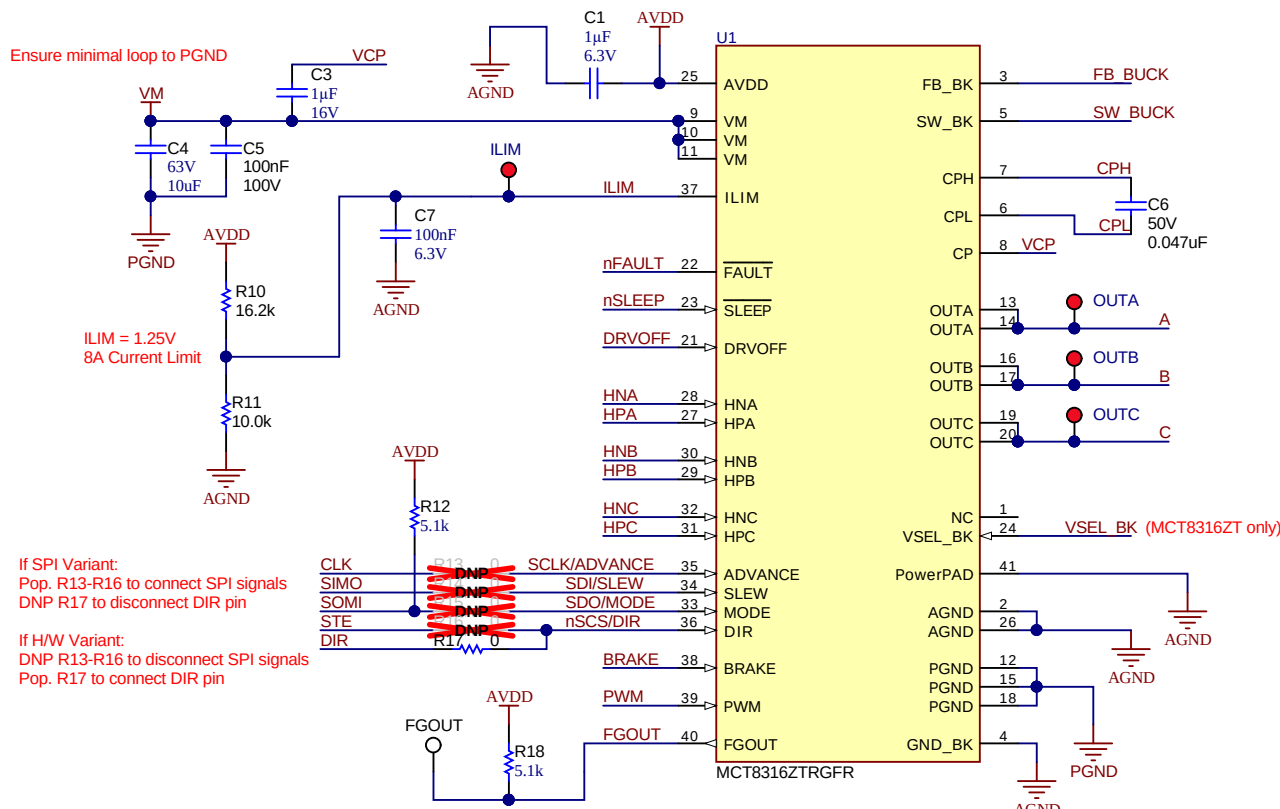
A

B

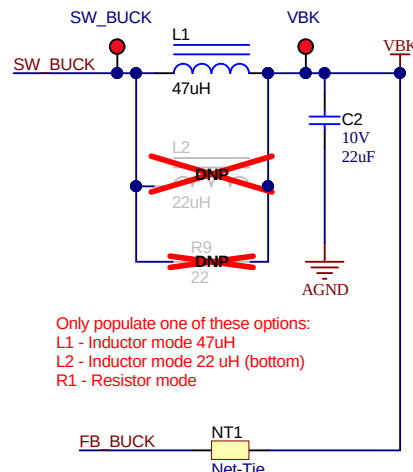
C

D

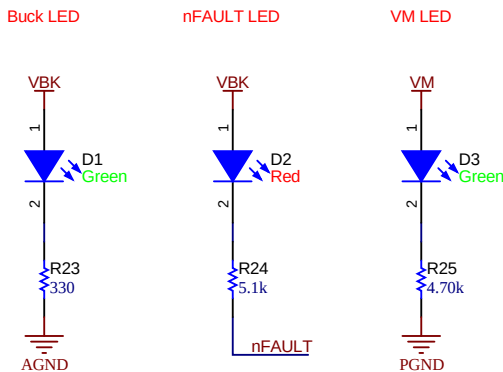
MCT8316ZT



3.3V Buck Regulator

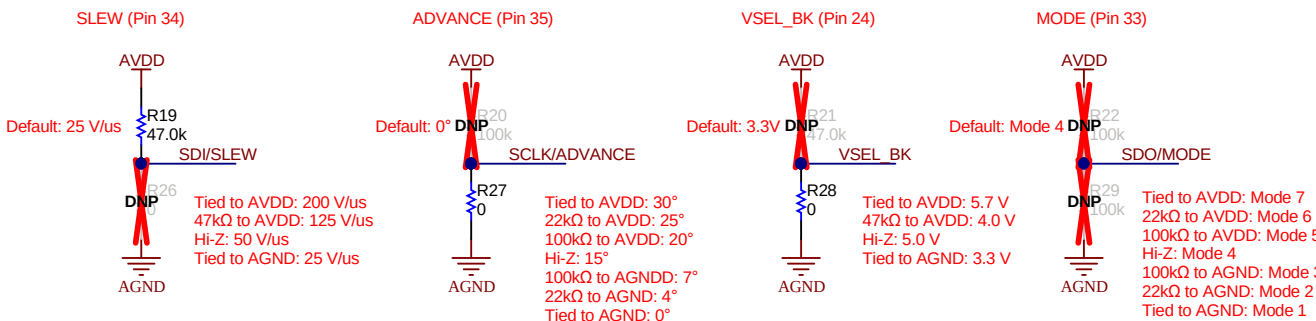


Status LEDs



MCT8316ZT Hardware Variant Settings

Hardware Variant Resistors (use with MCT8316ZT only)

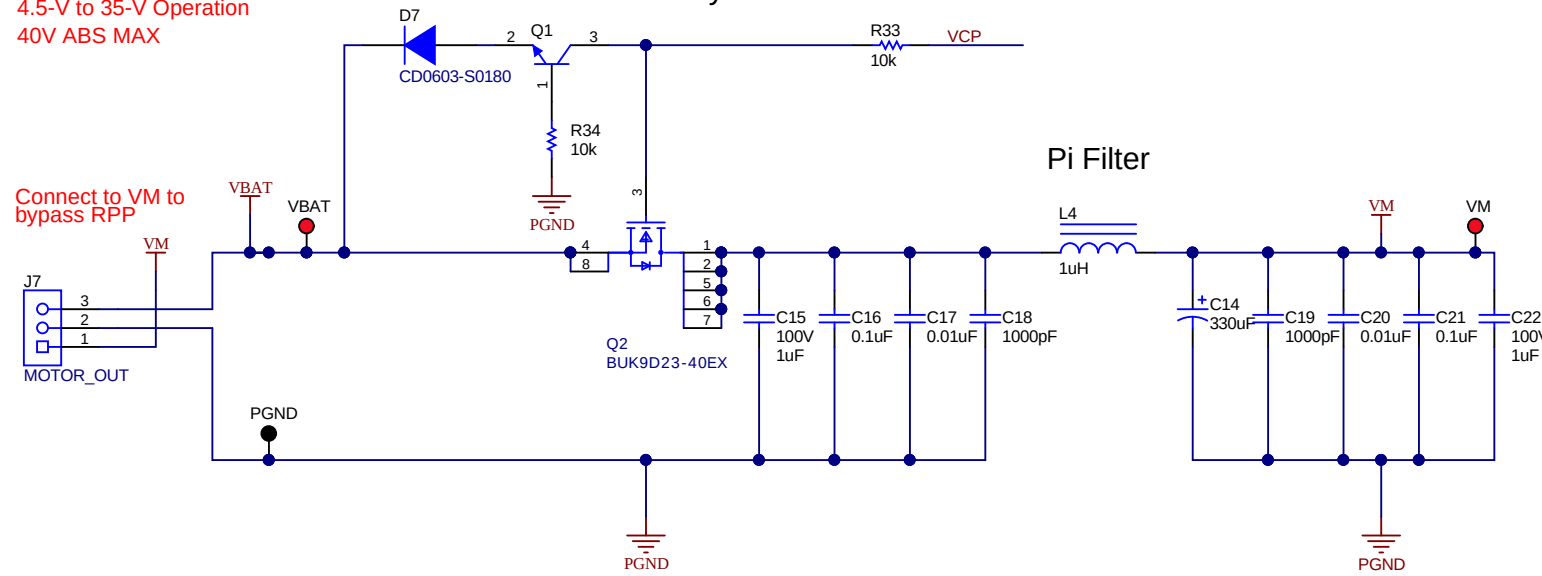


MODE Type	Hall Config	Modulation	ASR and AAR Mode
Mode 1	Analog Hall	Asynchronous	ASR and AAR Disabled
Mode 2	Digital Hall	Asynchronous	ASR and AAR Disabled
Mode 3	Analog Hall	Synchronous	ASR and AAR Disabled
Mode 4	Digital Hall	Synchronous	ASR and AAR Disabled
Mode 5	Analog Hall	Synchronous	ASR and AAR Enabled
Mode 6	Digital Hall	Synchronous	ASR and AAR Enabled
Mode 7	Digital Hall	Synchronous	ASR and AAR Enabled

MAIN SUPPLY

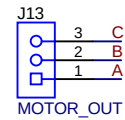
4.5-V to 35-V Operation
40V ABS MAX

Reverse Polarity Protection

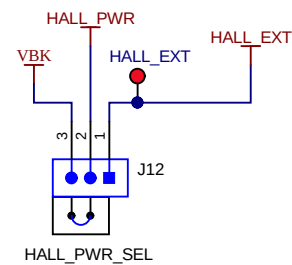


CONNECTORS & INTERFACE

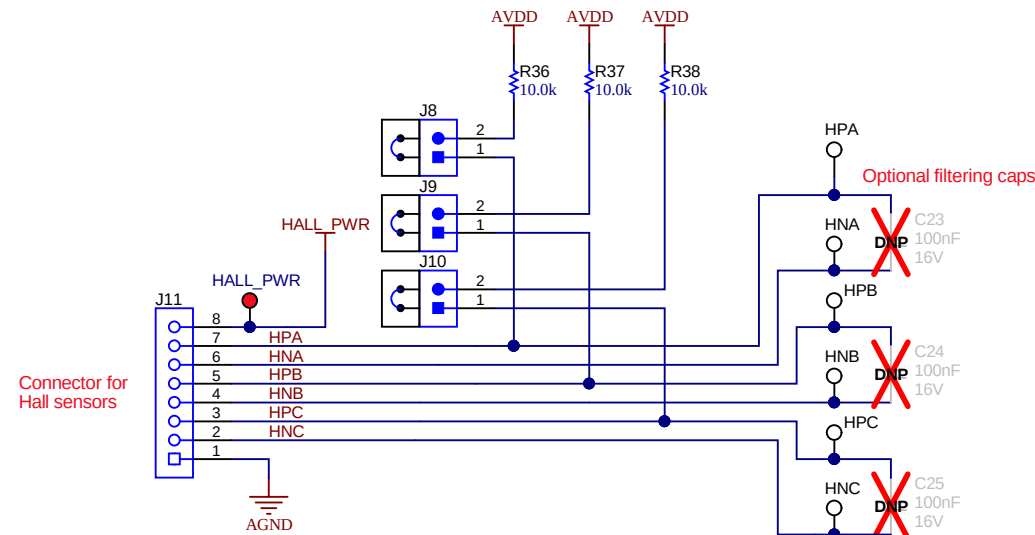
Motor Output



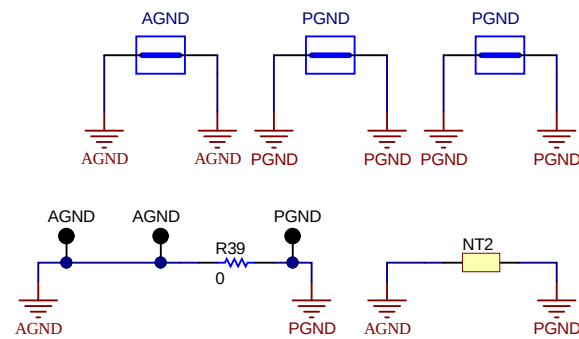
Hall Power Select



Hall Connections

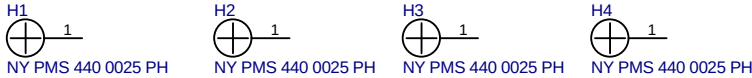


Grounding



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Orderable: MCT8316ZTEVM	Designed for: Public Release	Mod. Date: 8/25/2021	
TID #: N/A	Project Title: MCT8316ZTEVM		
Number: MD042	Rev: A	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 4 of 5	
Drawn By:	File: MD042A_POWER AND CONNECTORS.SchDoc	Size: B	
Engineer: Aaron Barrera	Contact: http://www.ti.com/support		http://www.ti.com © Texas Instruments 2021



PCB Number: MD042
PCB Rev: A

PCB
LOGO
Texas Instruments



PCB
LOGO
FCC disclaimer

PCB
LOGO
WEEE logo



CAUTION HOT SURFACE

Variant/Label Table	
Variant	Label Text
001	MCT8316ZTEVM

ZZ1
Label Assembly Note
This Assembly Note is for PCB labels only

ZZ2
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ3
Assembly Note
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ4
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

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Orderable: MCT8316ZTEVM		Designed for: Public Release	Mod. Date: 8/25/2021
TID #: N/A		Project Title: MCT8316ZTEVM	
Number: MD042	Rev: A	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 002	Sheet: 5 of 5
Drawn By:		File: MD042A_HARDWARE.SchDoc	Size: B
Engineer: Aaron Barrera		Contact: http://www.ti.com/support	