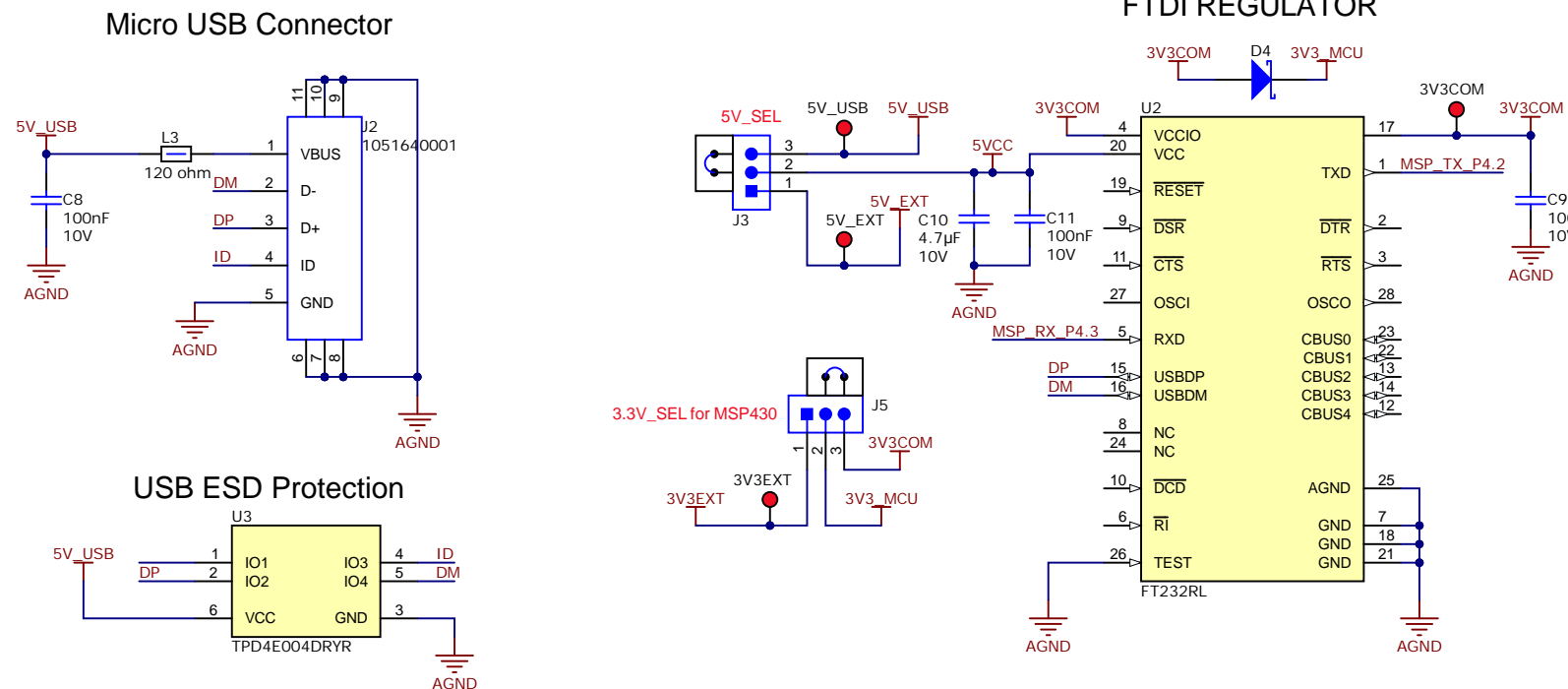
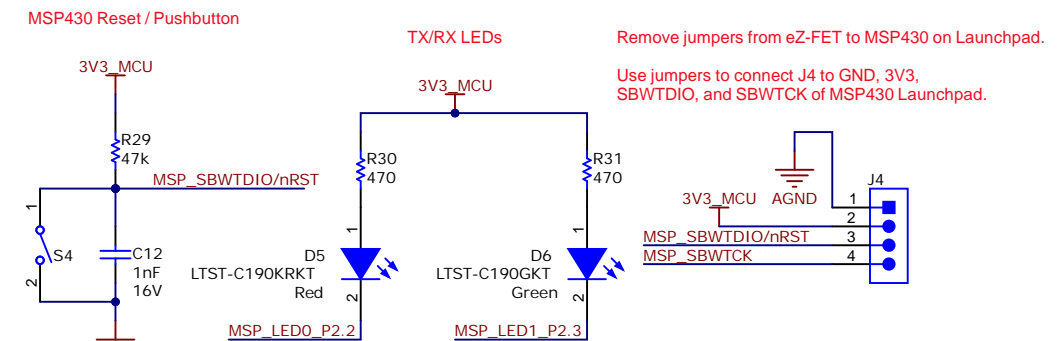


FTDI

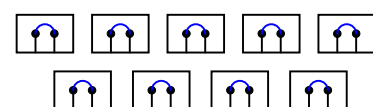
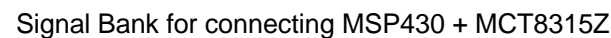


MCU PROGRAMMING



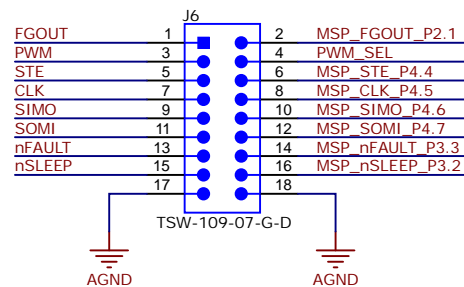
MSP430FR2355IPT

MSP430FR2355

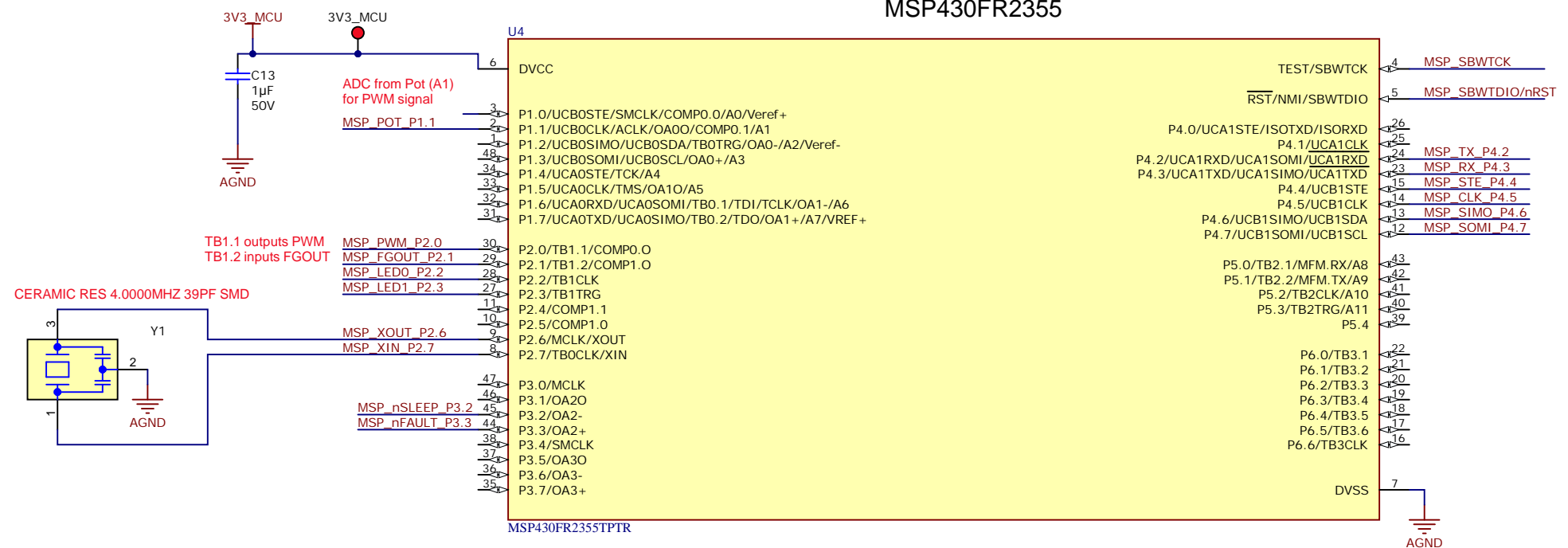


To MCT8315Z

To MSP430FR2355 (except PWM_SEL)



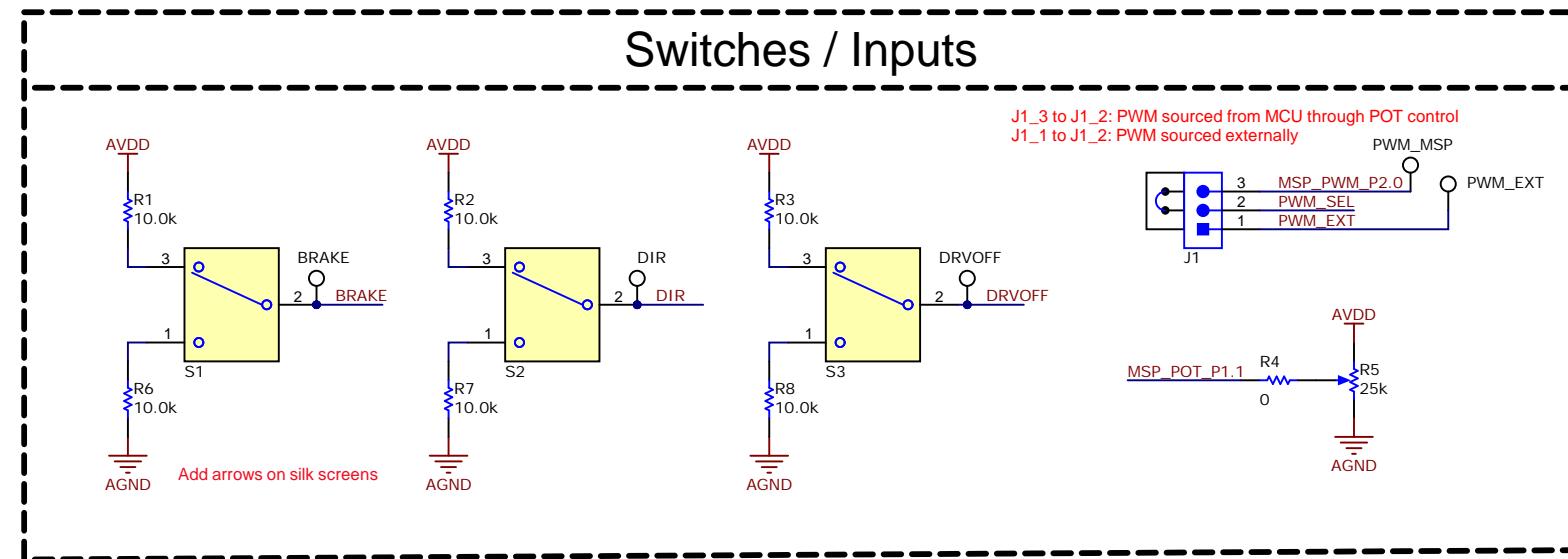
Populate jumpers to communicate onboard MSP430FR2355 to the MCT8315Z or depopulate jumpers to use standalone MSP430 or MCT8315Z.




Orderable:	MCT8315ZVM	Designed for:	Public Release	Mod. Date:	9/8/2023
TID #:	N/A	Project Title:	MCT8315ZVM		
Number:	MD079	Rev:	A	Sheet Title:	
SVN Rev:	Not in version control		Assembly Variant:	002	Sheet: 1 of 5
Drawn By:			File:	MD079_INTERFACE.SchDoc	Size: B
Engineer:	Hong Ze Khor		Contact:	http://www.ti.com/support	



Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.



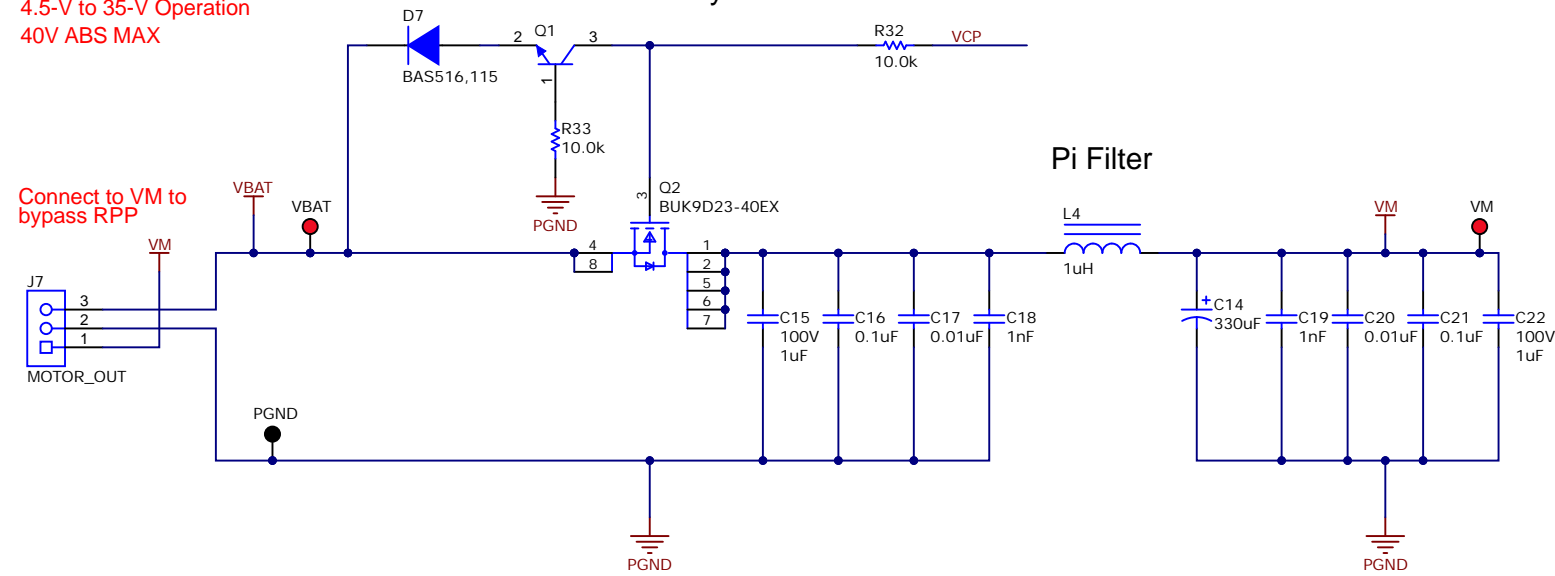
Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Orderable: MCT8315ZEV	Designed for: Public Release	Mod. Date: 8/22/2023	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2023
TID #: N/A	Project Title: MCT8315ZEV		
Number: MD079	Rev: A	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 2 of 5	
Drawn By:	File: MD079_CONTROL_SchDoc	Size: B	
Engineer: Hong Ze Khor	Contact: http://www.ti.com/support		

MAIN SUPPLY

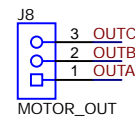
4.5-V to 35-V Operation
40V ABS MAX

Connect to VM to bypass RPP

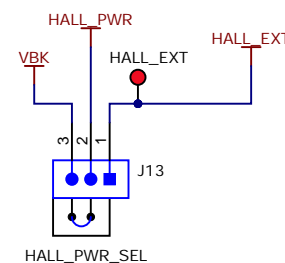


CONNECTORS & INTERFACE

Motor Output

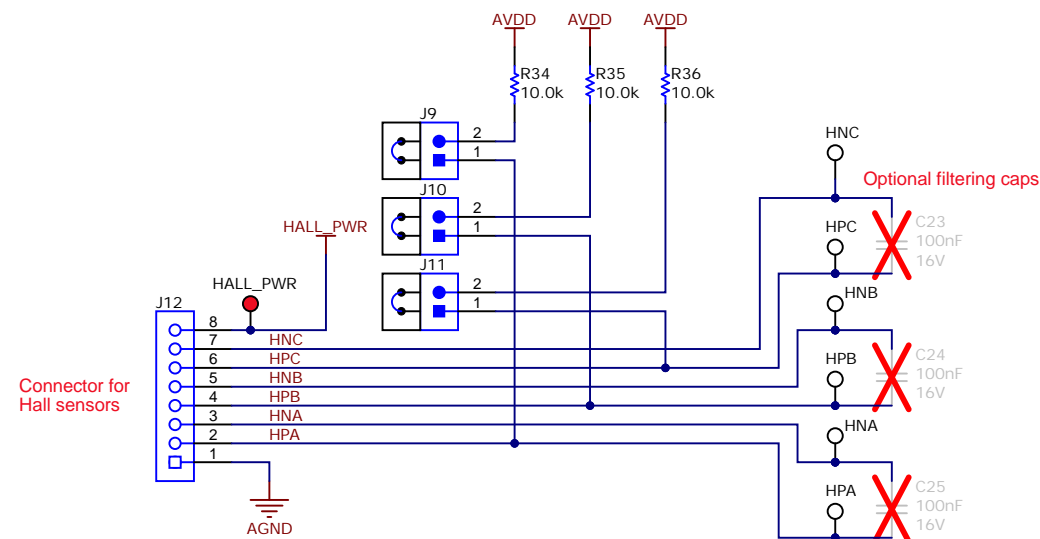


Hall Power Select



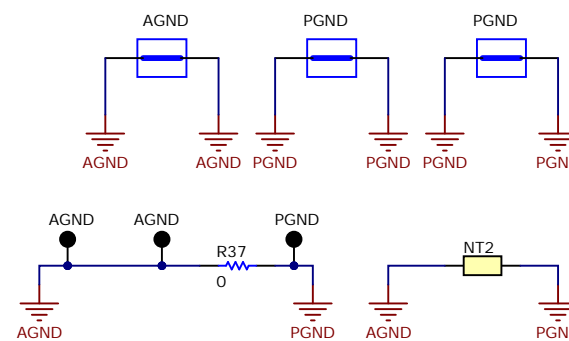
J9-1 to J9-2: External Hall Power
J9-3 to J9-2: Hall powered from
Buck on MCT8315Z
(default is 5V)

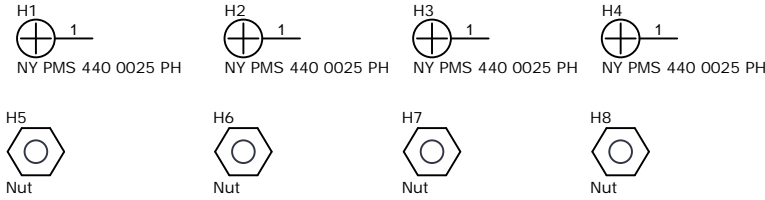
Hall Connections



Digital (single-ended): connect hall sensors to only HPx, install pullup jumpers J9-J11
Analog (differential): connect hall elements to HPx and HNx, remove pullup J9-J11

Grounding





PCB Number: MD079
PCB Rev: A

PCB
LOGO
Texas Instruments



PCB
LOGO
FCC disclaimer

PCB
LOGO
WEEE logo

LBL1
PCB Label
THT-14-423-10



CAUTION HOT SURFACE



CAUTION HOT SURFACE

Variant/Label Table	
Variant	Label Text
001	MCT8315ZEVMSPI
002	MCT8315ZEVMSHW
003	MCT8315ZEVMSHW, NO BUCK

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.