

STM32G4_DRV8301_Board

hardware V1.0

Designed by: JingLei

Table of contents

- Sheet 1: Project overview (this page)
- Sheet 2:
- Sheet 3:

Legend

- General comment such as function title, configuration, ...
- Text to be added to silkscreen.
- Warning text.

Notes to generate the board layout.

OPEN PLATFORM LICENSE AGREEMENT

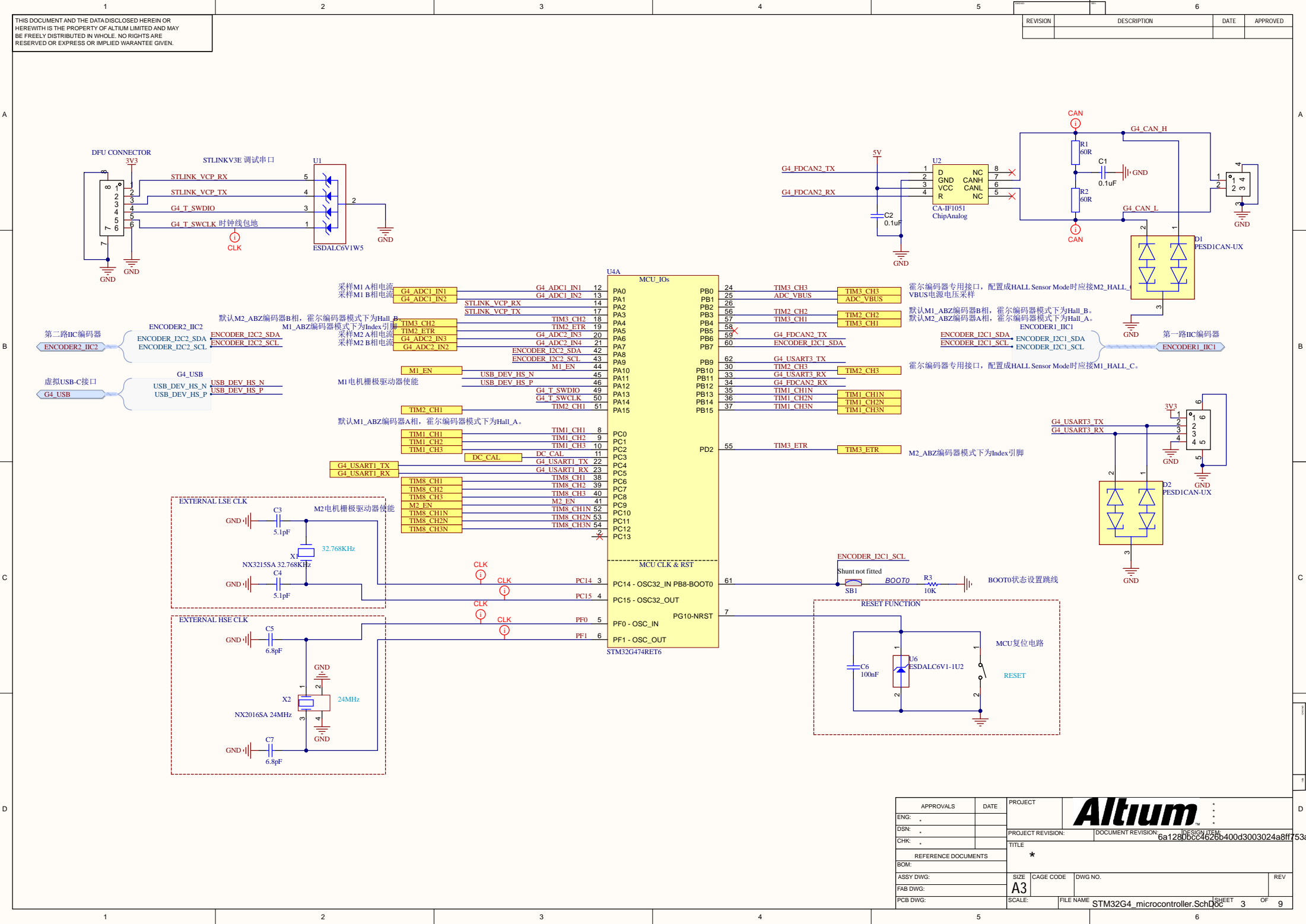
Top
STM32G4_DRV8301_hardware_TOP_V1.0.SchDoc



APPROVALS		DATE	PROJECT		<div>Altium</div>	
ENG:						
DSN:			PROJECT REVISION:			
CHK:			DOCUMENT REVISION:			
					DESIGN ITEM:	
REFERENCE DOCUMENTS			TITLE			
BOM:			*			
ASSY DWG:		SIZE	CAGE CODE		DWG NO.	
FAB DWG:		A3			REV	
PCB DWG:		SCALE:	FILE NAME		Project_overview.SchDoc	
					SHEET 1	OF 9



SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME	STM32G4_DRV8301_hardware	SHEET TOP 1.0 SchDoc



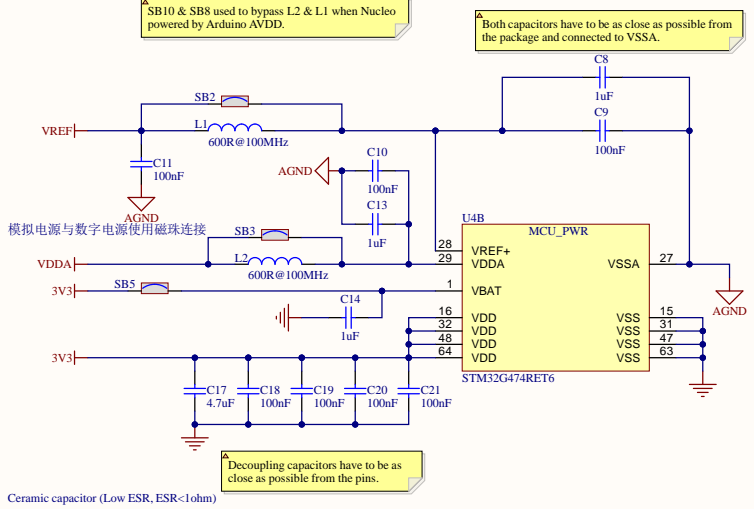
THIS DOCUMENT AND THE DATA DISCLOSED HEREIN OR HEREWITH IS THE PROPERTY OF ALTUM LIMITED AND MAY BE FREELY DISTRIBUTED IN WHOLE. NO RIGHTS ARE RESERVED OR EXPRESS OR IMPLIED WARRANTEE GIVEN.

REVISION	DESCRIPTION	DATE	APPROVED

A

A

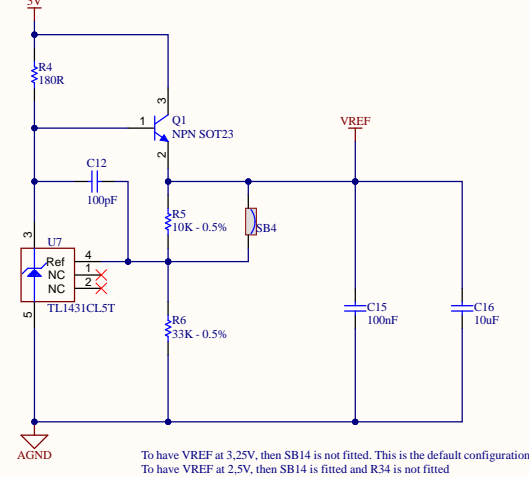
G474 POWER



B

B

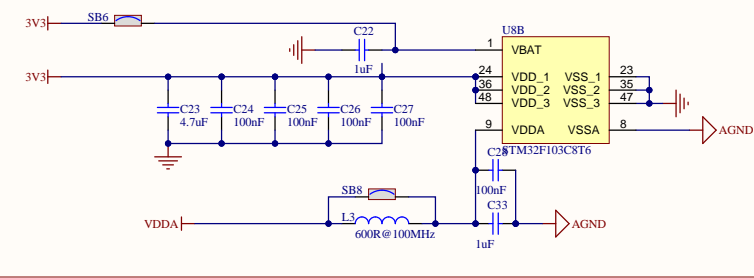
VREF PWR



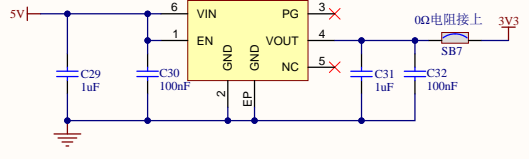
C

C

F103 POWER



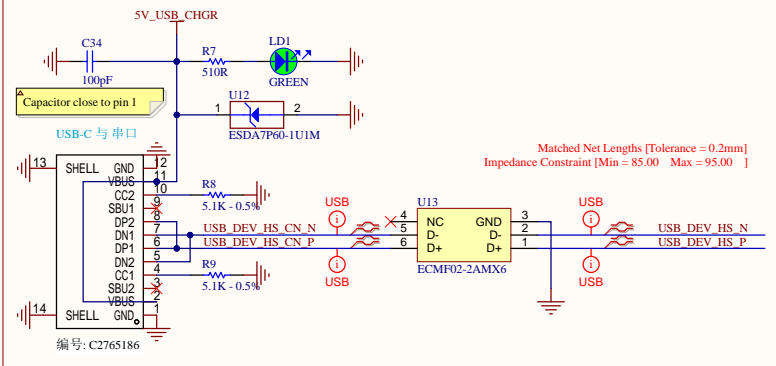
VDD PWR



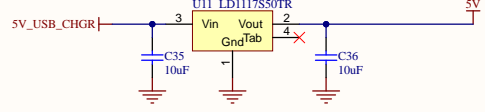
D

D

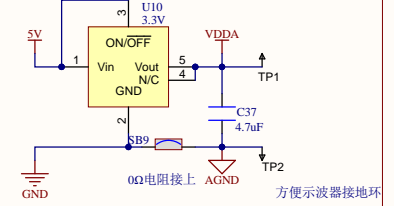
Visual USB-C CONNECTOR



VIN / 5V PWR



VDDA Power



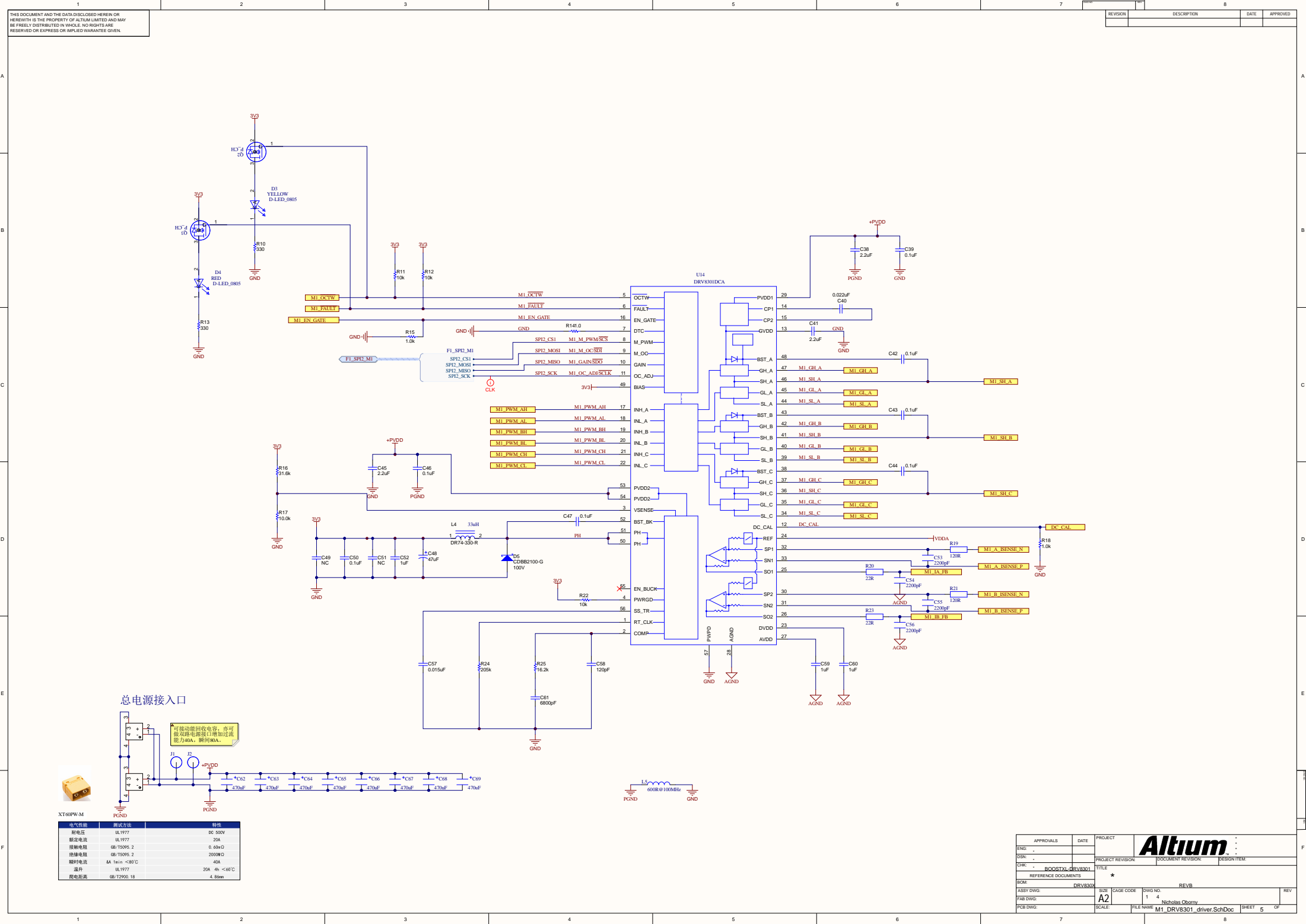
虚拟USB-C接口



APPROVALS	DATE	PROJECT	Altium	
ENG: -		PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:
DSN: -		TITLE		
CHK: -		★		
REFERENCE DOCUMENTS		BOM:		
ASSY DWG:	SIZE	CAGE CODE	DWG NO.	REV
FAB DWG:	A3			
PCB DWG:	SCALE:	FILE NAME	SHEET 1 OF 9	

THIS DOCUMENT AND THE DATA DISCLOSED HEREIN OR HEREWITH IS THE PROPERTY OF ALTUM LIMITED AND MAY BE FREELY DISTRIBUTED IN WHOLE. NO RIGHTS ARE RESERVED OR EXPRESSED OR IMPLIED WARRANTY GIVEN.

A
B
C
D
E
F



总电源接入口

可接动态回收电容，亦可
接双路电源关断增加过流
能力40A，瞬态80A。

电气性能	测试方法	典型值
额定电压	UL 1977	DC 500V
额定电流	UL 1977	20A
绝缘电阻	GB/T5095.2	0.6MΩ
绝缘电阻	GB/T5095.2	2000MΩ
额定电流	1A 1min <80℃	40A
温升	UL 1977	20A 4h <60℃
爬电距离	GB/T2950.18	4.8mm

APPROVALS	DATE	PROJECT	Altium	
ENG		PROJECT REVISION	DOCUMENT REVISION	DESIGN ITEM
DES		TITLE		
CHK		* BOOZAL-REV0301		
REFERENCE DOCUMENTS				
BOA	DRV8301	REV0301	REV0301	
ASBY DWG:	SIZE	CAGE CODE	DWG NO.	REV
FAB DWG:	A2	1	4	Nicholas Oborny
PCB DWG:	SCALE	FILE NAME	M1_DRV8301_driver.SchDoc	SHEET 5 OF

THIS DOCUMENT AND THE DATA DISCLOSED HEREIN OR HEREWITH IS THE PROPERTY OF ALTUM LIMITED AND MAY BE FREELY DISTRIBUTED IN WHOLE. NO RIGHTS ARE RESERVED OR EXPRESSED OR IMPLIED WARRANTY GIVEN.

A

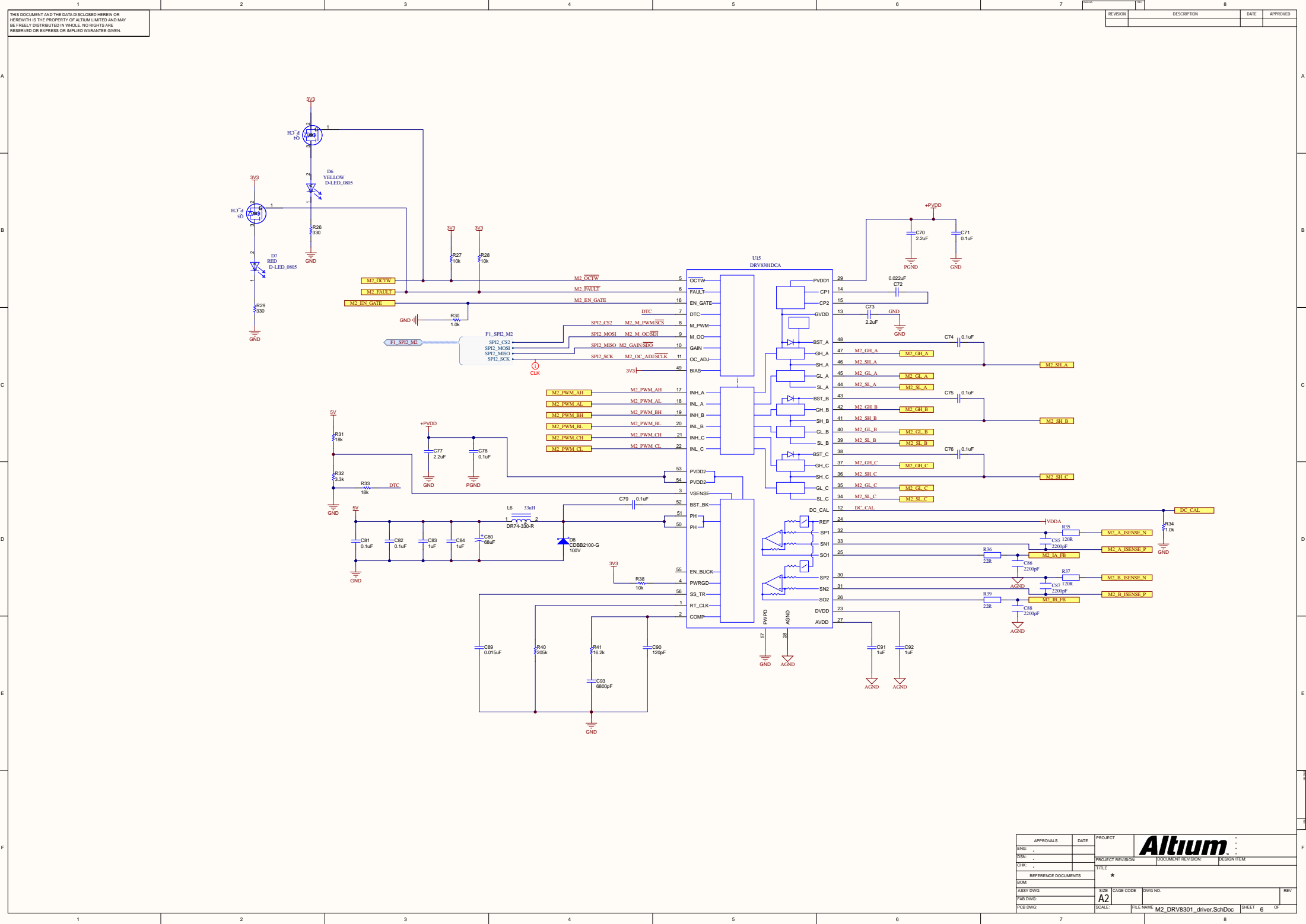
B

C

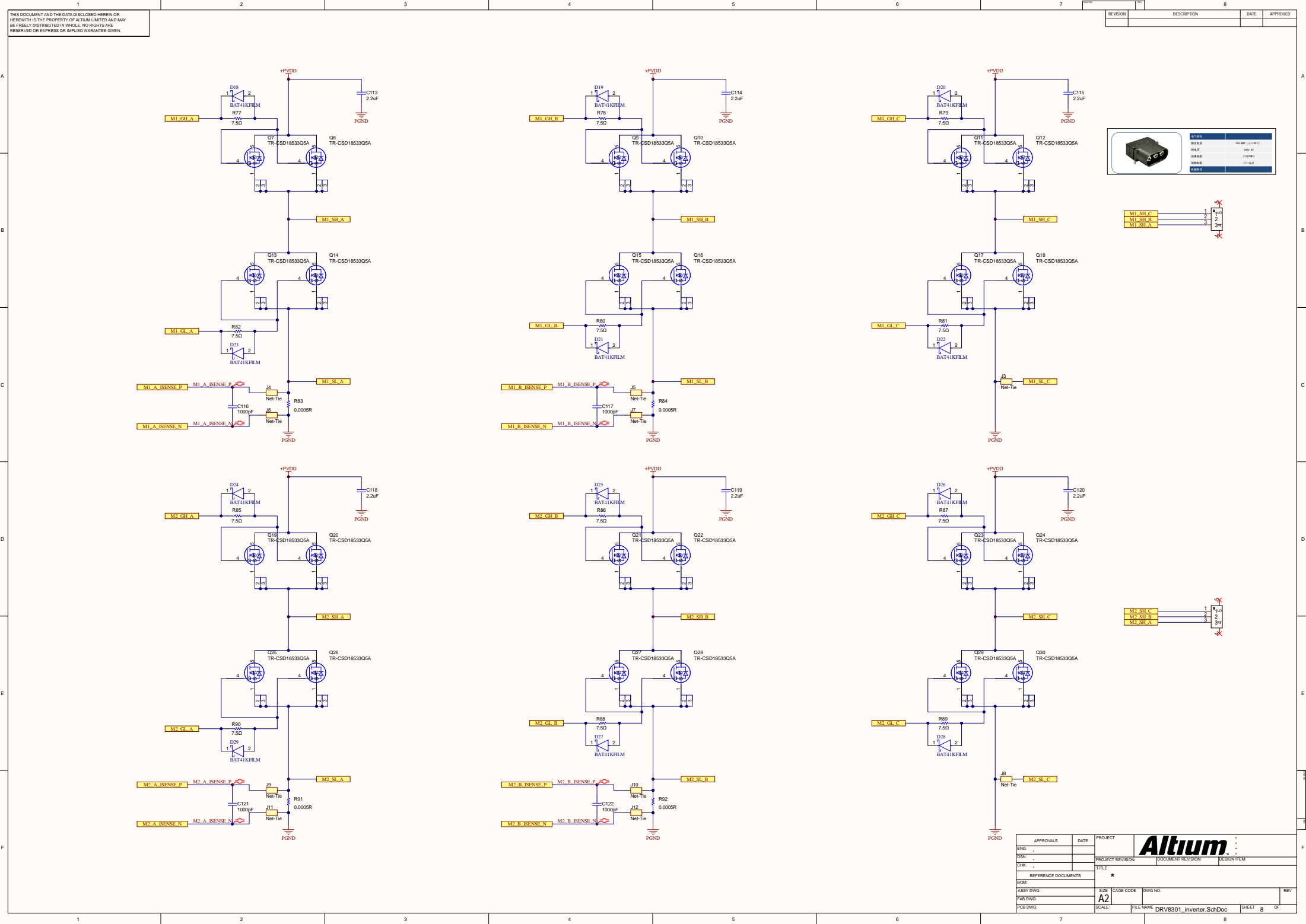
D

E

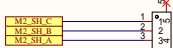
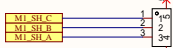
F



APPROVALS		DATE	PROJECT		Altium	
ENG			PROJECT REVISION		DOCUMENT REVISION	DESIGN ITEM
DSN			TITLE			
CHK			★			
REFERENCE DOCUMENTS						
BOA						
ASBY DWG			SIZE	CAGE CODE	DWG NO.	REV
FAB DWG			A2			
PCB DWG			SCALE	FILE NAME		M2_DRV8301_driver.SchDoc
					SHEET	6 OF



THIS DOCUMENT AND THE DATA DISCLOSED HEREIN OR HEREWITH IS THE PROPERTY OF ALTUM LIMITED AND MAY BE FREELY DISTRIBUTED IN WHOLE. NO RIGHTS ARE RESERVED OR EXPRESSED OR IMPLIED WARRANTY GIVEN.



APPROVALS		DATE	PROJECT		Altium			
ENG								
DSN								
CHK								
REFERENCE DOCUMENTS			TITLE					
			★					
BOM								
ASBY DWG.			SIZE		CAGE CODE		DWG. NO.	
FAB DWG.			A2				REV	
PCB DWG.			SCALE		FILE NAME		SHEET 8 OF	
					DRV8301_inverter.SchDoc			

