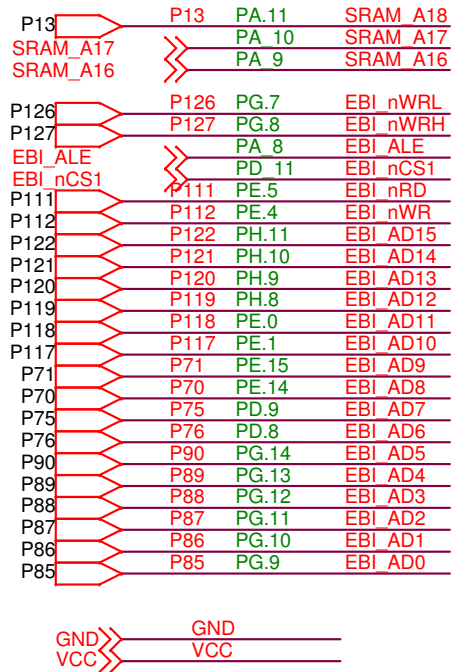
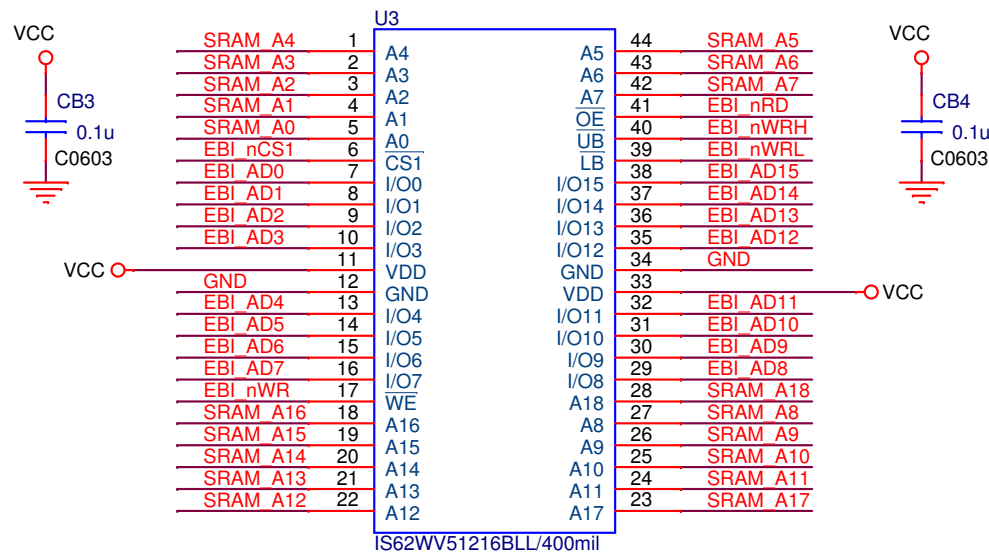
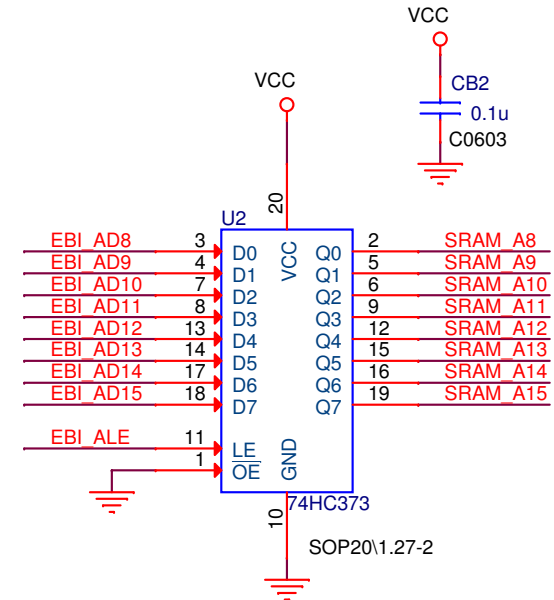
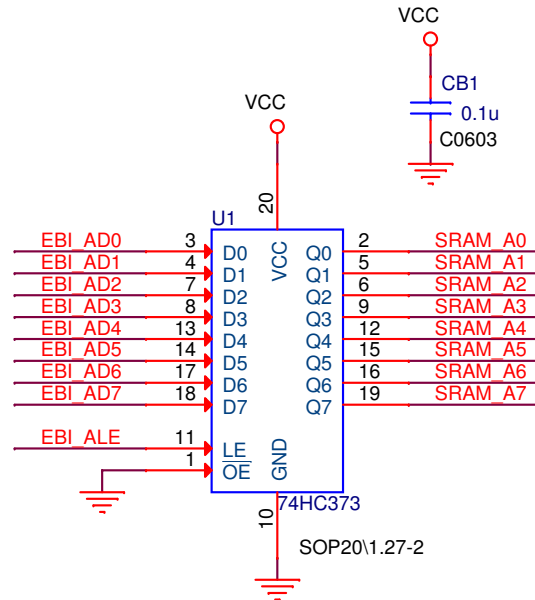


## SRAM Off-page



NOTE:

SRAM address bus A16/A17/A18 are GPIO-controlled by MCU firmware. Not EBI hardware interface directly to drive.



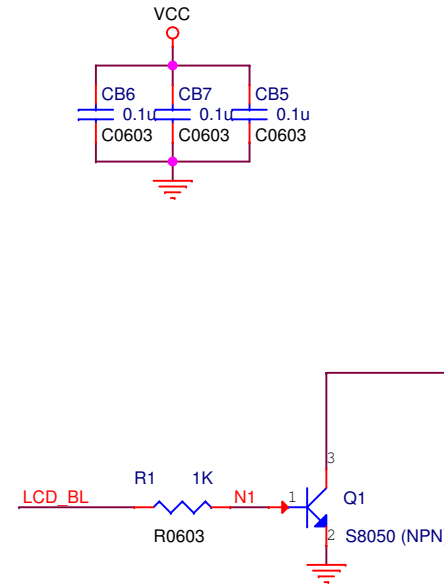
# SRAM

## nuvoTon

Title		
NuMaker M487 Advance (LV2)		
Size	Document Number	Rev
A	SRAM	V4.0
Date:	Tuesday, April 24, 2018	Sheet 1 of 8

## TFT LCD Off-page

P111	P111	PE.5	EBI_nRD
P112	P112	PE.4	EBI_nWR
P123	P123	PD.14	EBI_nCS0
P122	P122	PH.11	EBI_AD15
P121	P121	PH.10	EBI_AD14
P120	P120	PH.9	EBI_AD13
P119	P119	PH.8	EBI_AD12
P118	P118	PE.0	EBI_AD11
P117	P117	PE.1	EBI_AD10
P71	P71	PE.15	EBI_AD9
P70	P70	PE.14	EBI_AD8
P75	P75	PD.9	EBI_AD7
P76	P76	PD.8	EBI_AD6
P90	P90	PG.14	EBI_AD5
P89	P89	PG.13	EBI_AD4
P88	P88	PG.12	EBI_AD3
P87	P87	PG.11	EBI_AD2
P86	P86	PG.10	EBI_AD1
P85	P85	PG.9	EBI_AD0
P40	P40	PH.3	LCD_RS
P144	P144	PB.6	LCD_RESET
P143	P143	PB.7	LCD_BL
P141	P141	PB.9	LCD_XR
P142	P142	PB.8	LCD_YU
P41	P41	PH.4	LCD_XL
P42	P42	PH.5	LCD_YD
GND		GND	
VCC		VCC	



# TFT LCD

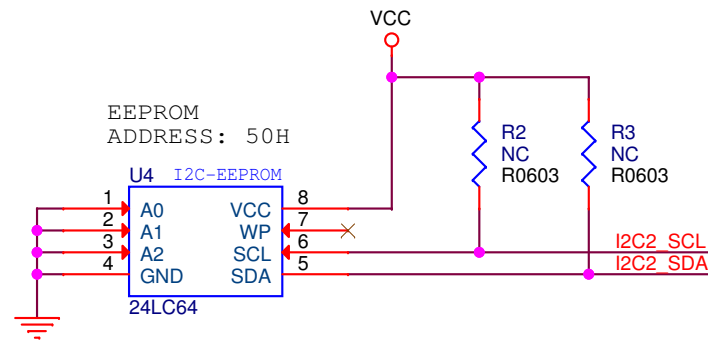
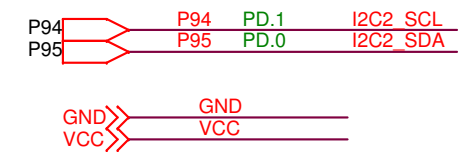
EBI_AD0	1
EBI_AD1	2
EBI_AD2	3
EBI_AD3	4
GND	5
VCC	6
EBI_nCS0	7
LCD_RS	8
EBI_nWR	9
EBI_nRD	10
LCD_XL	11
LCD_YU	13
LCD_XR	14
LCD_YD	15
VCC	16
LEDK	17
	18
	19
	20
EBI_AD4	21
EBI_AD8	23
EBI_AD9	24
EBI_AD10	25
EBI_AD11	26
EBI_AD12	27
EBI_AD13	28
EBI_AD14	29
EBI_AD15	30
LCD_RESET	31
VCC	32
VCC	33
GND	34
EBI_AD5	35
EBI_AD6	36
EBI_AD7	37

PFC CONN 37-pin (0.8 pitch)

# nuvoTon

Title		
NuMaker M487 Advance (LV2)		
Size	Document Number	Rev
A4	TFT LCD Module	V4.0
Date:	Monday, April 23, 2018	Sheet 2 of 8

## EEPROM Off-page



# I2C EEPROM

**nuvoTon**

Title

**NuMaker M487 Advance (LV2)**

Size  
A

Document Number

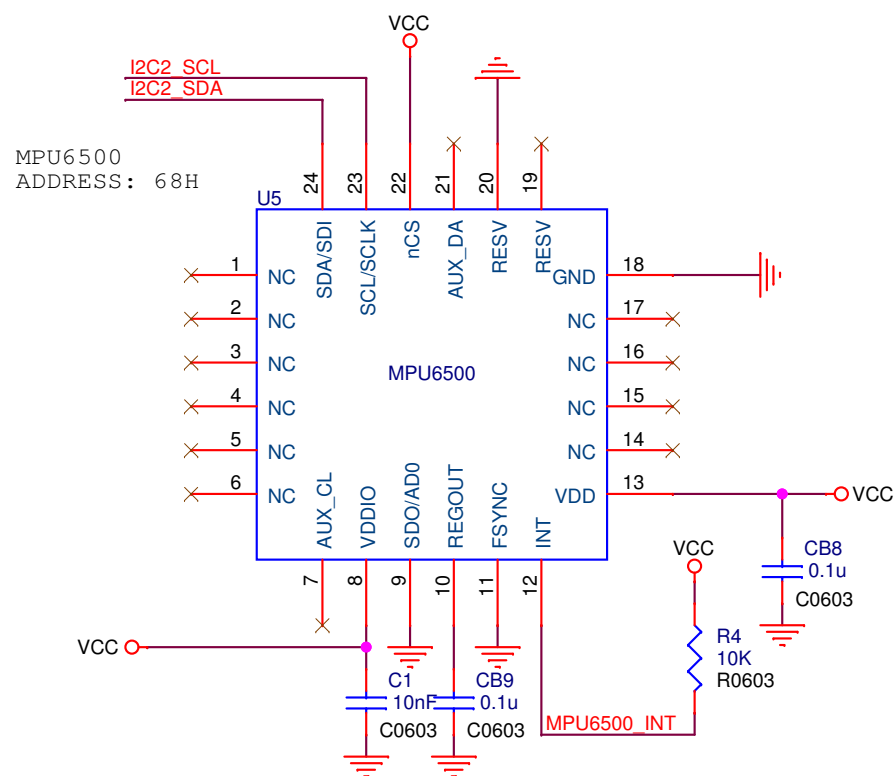
**I2C EEPROM**

Rev  
**V4.0**

Date: Friday, June 08, 2018

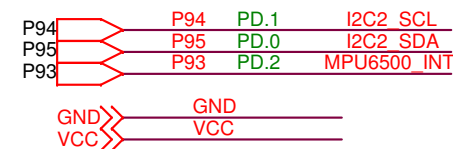
Sheet 3 of 8

3-Axis ACC, 3-Axis Gyro



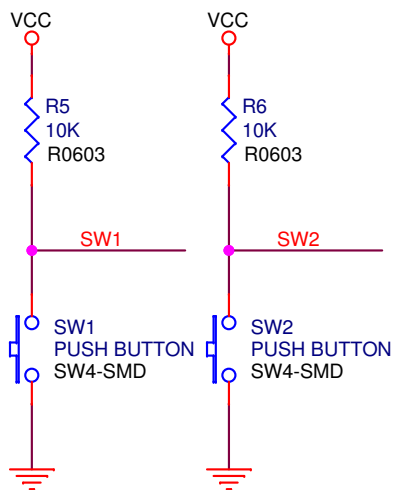
***I2C MEMS***

***MEMS Off-page***

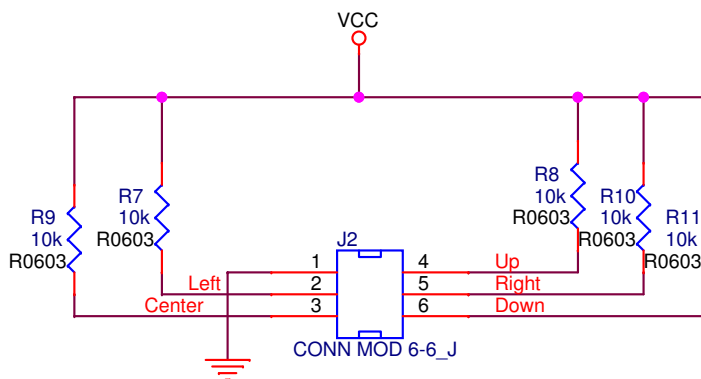


**nuvoTon**

Title		
NuMaker M487 Advance (LV2)		
Size	Document Number	Rev
A	MEMS (MPU6500)	V4.0
Date:	Friday, June 08, 2018	Sheet 4 of 8



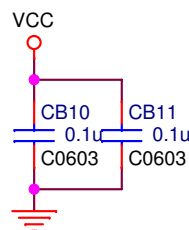
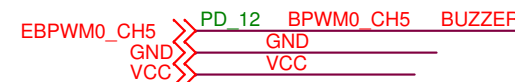
**Key**



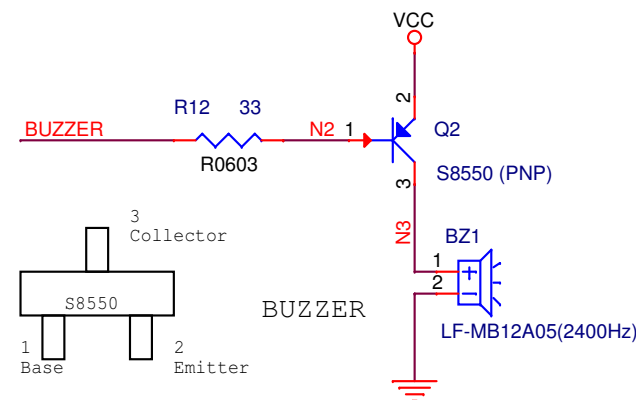
**Joystick**

## Joystick/LED/Key/Buzzer Off-page

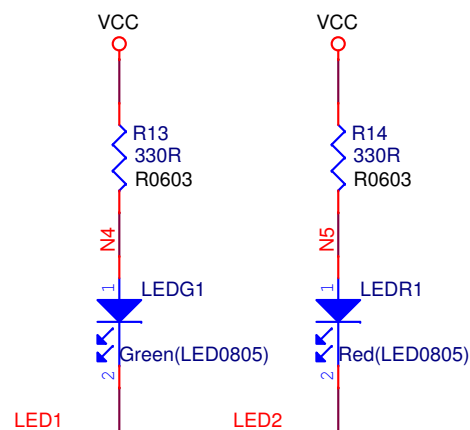
P25	P25	PG.2	Up
P26	P26	PG.3	Center
P27	P27	PG.4	Right
P7	P7	PC.10	Down
P8	P8	PC.9	Left
P43	P43	PH.6	LED2
P44	P44	PH.7	LED1
P67	P67	PA.1	SW2
P68	P68	PA.0	SW1
P3	P3	PB.3	IO1
P92	P92	PD.3	IO2



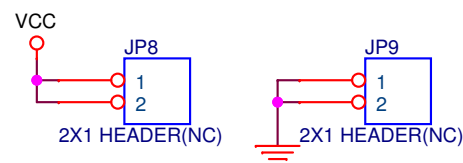
**Power**



**Buzzer**



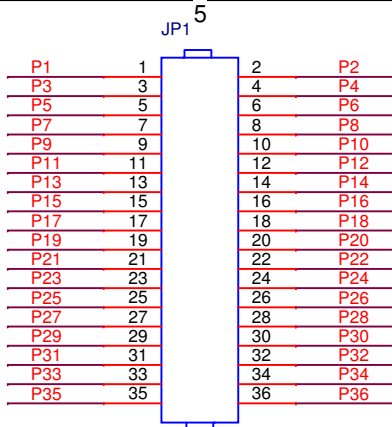
**LED**



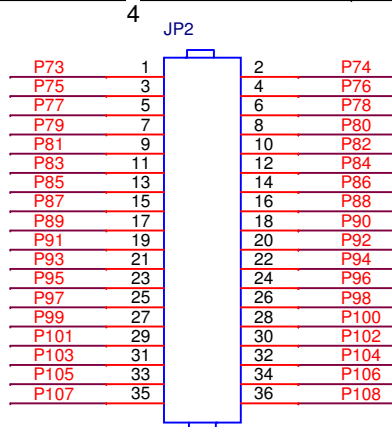
**GPIO**

**nuvoTon**

Title		
NuMaker M487 Advance (LV2)		
Size A	Document Number	Rev
	Joystick, LED, Keys and Buzzer	V4.0
Date:	Friday, April 27, 2018	Sheet 5 of 8

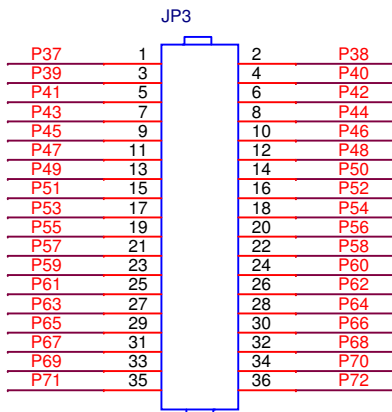


HEADER 2.54 18X2 SMD (male)

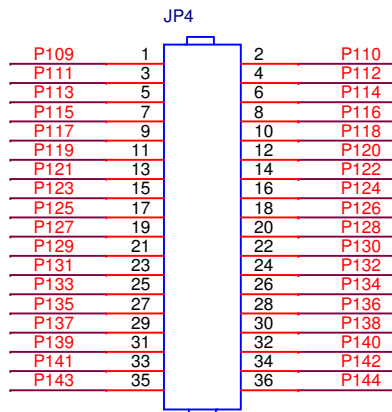


HEADER 2.54 18X2 SMD (male)

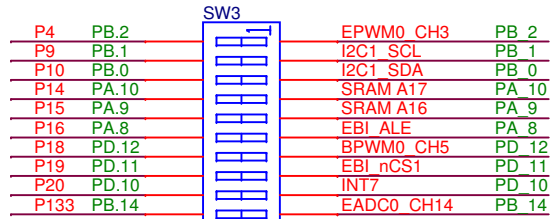
## MCU CONNECTOR



HEADER 2.54 18X2 SMD (male)



HEADER 2.54 18X2 SMD (male)



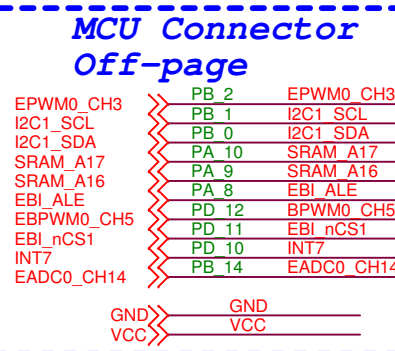
SWDIP10 (SMD, all ON)

Default: All ON

# nuvoTon

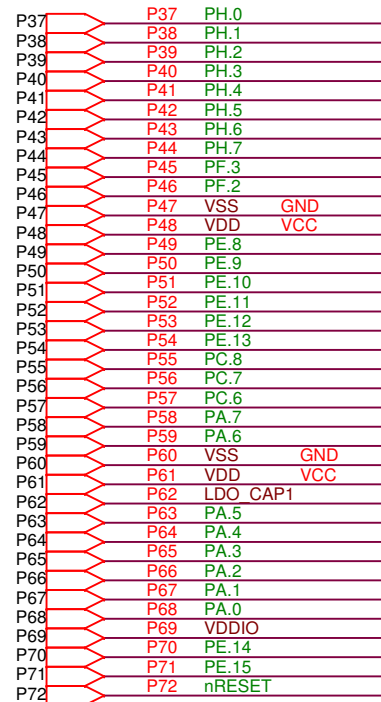
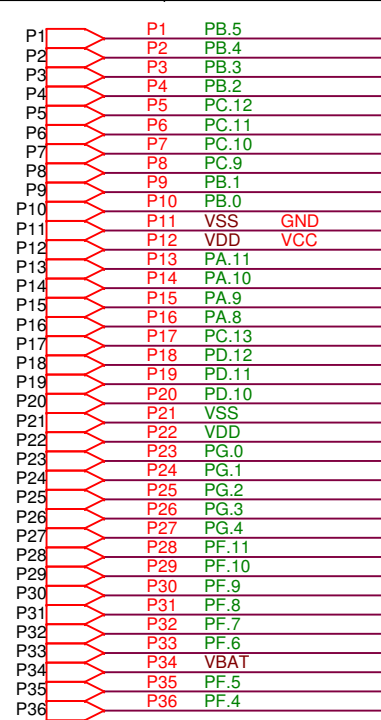
**NuMaker M487 Advance (LV2)**

Title	NuMaker M487 Advance (LV2)	
Size	A4	Document Number
Rev	V4.0	MCU Connectors
Date:	Tuesday, April 24, 2018	Sheet 6 of 8



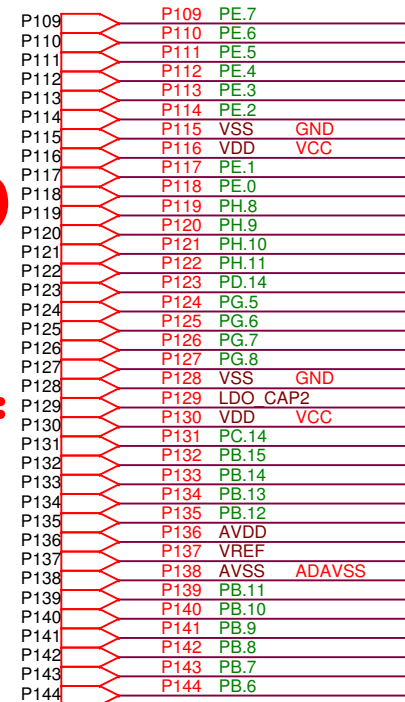
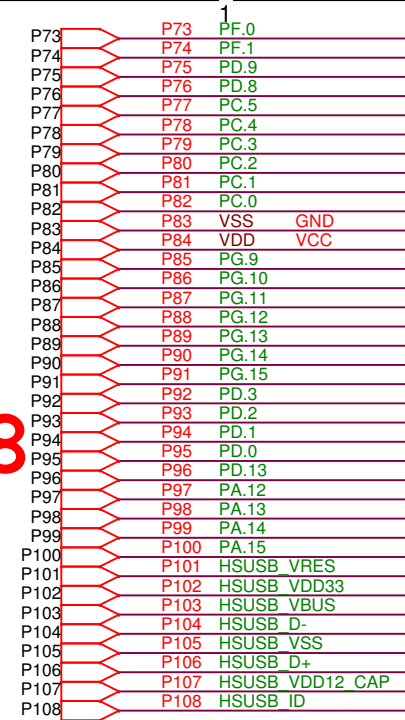
P1  
~  
P36

P37  
~  
P72



P73  
~  
P108

P109  
~  
P144

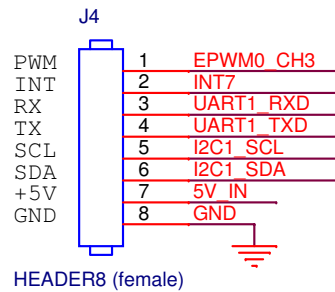
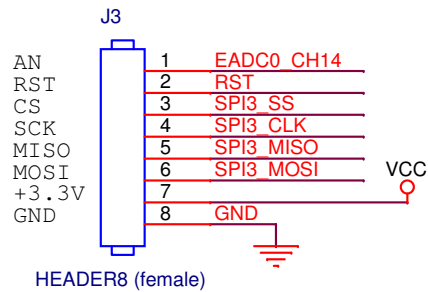


## Mikro Bus Off-page

EPWM0_CH3	PB 2	EPWM0_CH3
I2C1_SCL	PB 1	I2C1_SCL
I2C1_SDA	PB 0	I2C1_SDA
INT7	PD 10	INT7
EADC0_CH14	PB 14	EADC0_CH14

P23	P23	PG.0	UART1_TXD
P24	P24	PG.1	UART1_RXD
P124	P124	PG.5	SPI3_SS
P125	P125	PG.6	SPI3_CLK
P5	P5	PC.12	SPI3_MISO
P6	P6	PC.11	SPI3_MOSI
P72	P72	nRESET	RST
P97	P97	PA.12	5V_IN
P103	P103	HSUSB_VBUS	5V_IN

GND	GND
VCC	VCC



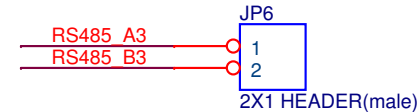
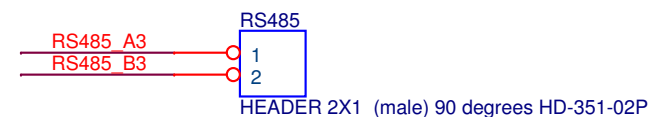
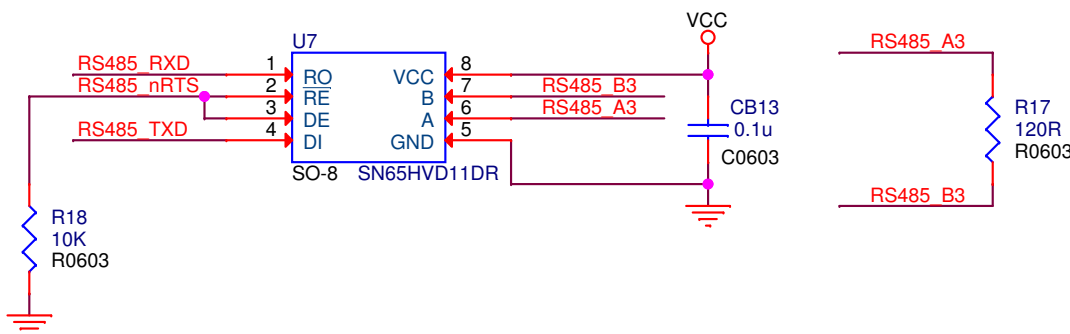
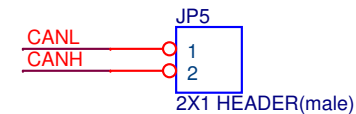
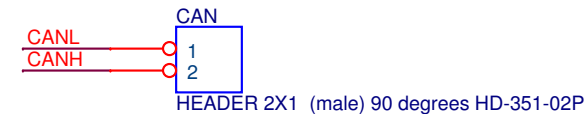
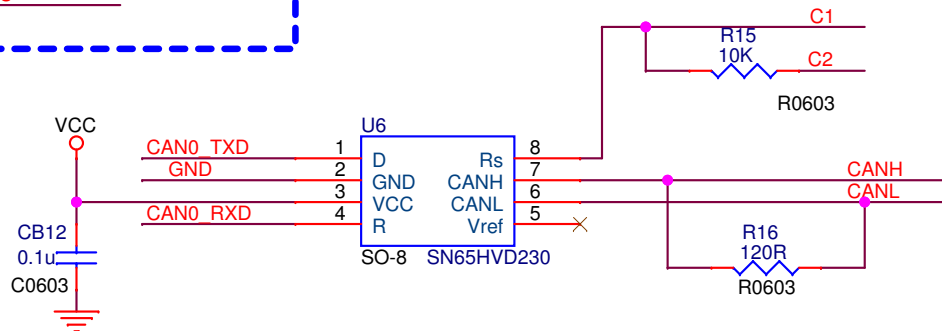
# Mikro Bus

## nuvoTon

Title		
NuMaker M487 Advance (LV2)		
Size	Document Number	Rev
A	Mikro Bus	V4.0
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## CAN and RS485 Off-page

P63	P63	PA.5	CAN0_TXD
P64	P64	PA.4	CAN0_RXD
P65	P65	PA.3	C2
P66	P66	PA.2	C1
P37	P37	PH.0	RS485_TXD
P38	P38	PH.1	RS485_RXD
P39	P39	PH.2	RS485_nRTS
GND		GND	
VCC		VCC	



# CAN and RS485

## nuvoTon

Title		
NuMaker M487 Advance (LV2)		
Size	Document Number	Rev
A	CAN and RS485	V4.0
Date:	Monday, April 23, 2018	Sheet 8 of 8