

MG04-04A Pin Using Table

2021_0423

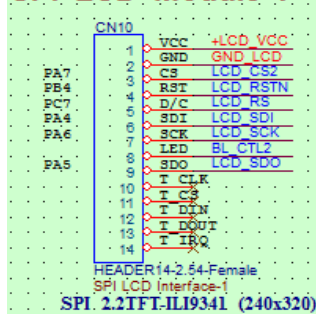
MCU Pin	AFS / ANA			PCB Default Function	PCB Option Function	8080-LCD Module1/2	SPI-LCD Module1/2	Module Connectors (MX,I2C,SPI)	
PA0	TM36_OC00			RGB1_P2 (B)				I2C_AUX0	LED-B
PA1	TM36_OC10			RGB1_P4 (R)				I2C_AUX1	LED-R
PA2	TM36_OC2			RGB1_P6 (G)				I2C_AUX2	LED-G
PA3	ADC_I3							I2C_AUX3	VR_IN
PA4	URT0_TX	TM20_OC00		LCD_SDI			LCD_SDI		
PA5	URT0_RX	TM20_OC10		LCD_SDO			LCD_SDO		
PA6	URT0_CLK	TM20_OC0H		LCD_SCK			LCD_SCK		
PA7	URT0_NSS			LCD_CS2			LCD_CS2		
PA8	ADC_I8		SPI0_NSS	AUI_R				MX_G4	AUI_R
PA9	ADC_I9		SPI0_MISO	AUI_L				MX_G3	AUI_L
PA10	GPIO	TM26_OC2H	SPI0_CLK	BL_IRQ	AU_OUT			MX_G7	
PA11	URT5_RX	GPIO	SPI0_MOSI	ARGB_OUT				MX_G6	
PA12	TM36_IC0	ADC_I12		Shuttle_A				MX_G2	LED-R
PA13	TM36_IC1	ADC_I13		Shuttle_B				MX_G1	LED-B
PA14	ADC_I14			KEY_IN1/S1				MX_G0	LED-G
PA15	ADC_I15		TM26_OC1H	KEY_IN0				MX_G11	
PB0	URT2_NSS		URT1_NSS	BL_NSS				MX_NSS	
PB1	UR2_CLK		URT1_RX	BL_CLK				MX_MISO	
PB2	DAC_P0		URT1_CLK	AU_OUT				MX_TXD	AUO_L
PB3	URT2_RX	URT1_TX	TM26_OC1H	BL_MOSI	ARGB_OUT			MX_RXD	AUO_R
PE0	URT4_TX	URT0_TX	I2C0_SCL	PC_URT_TX					
PE1	URT4_RX	URT0_RX	I2C0_SDA	PC_URT_RX				I2C_WP	
PE2	I2C1_SCL		URT5_TX	EP_SCL				I2C_SCL	
PE3	I2C1_SDA	URT1_RX	URT5_RX	EP_SDA	ARGB_OUT			I2C_SDA	
PB4	MALE			LCD_RSTN(*1)		LCD_RSTN(*1)	LCD_RSTN(*1)		
PB5	MOE			LCD_RD		LCD_RD			
PB6	MWE			LCD_WR		LCD_WR			
PB7	MCE			LCD_CS (*1)		LCD_CS (*1)			
PB8	MAD0			DB15		DB15			
PB9	MAD1			DB14		DB14			
PB10	MAD2			DB13		DB13			
PB11	MAD3			DB12		DB12			
PB12	MAD4			DB11		DB11			
PB13	MAD5			DB10		DB10			
PB14	MAD6			DB9		DB9			
PB15	MAD7			DB8		DB8			
PE8	URT2_TX			BL_MISO					
PE9	GPIO			BL_CTL2(*2)		BL_CTL(*2)	BL_CTL2(*2)		
PC0	ICKO			CLK_OUT					
PC1	MAD8			DB7		DB7			
PC2	MAD9			DB6		DB6			
PC3	MAD10		URT1_CLK	DB5		DB5	SGK		
PC4	SWCLK			SWCLK					
PC5	SWDIO			SWDIO					
PC6	RSTN			RSTN					
PC7	MBW0			LCD_RS(*1)		LCD_RS(*1)	LCD_DC(*1)		
PC8	MAD11		URT1_TX	DB4		DB4	SDI		
PC9	MAD12		URT1_RX	DB3		DB3	SDO		
PC10	MAD13			DB2		DB2	DIC (*2)		
PC11	MAD14			DB1		DB1	RESET (*2)		
PC12	MAD15			DB0		DB0			
PC13	GPIO	XIN	URT1_NSS	LED0	XIN		/CS (*2)		
PC14	GPIO	XOUT		LED1	XOUT				

PE12	GPIO			CFG0					
PE13	GPIO			CFG1					
PE14	GPIO			CFG2,LED2					
PE15	GPIO			CFG3,LED3					
PD0	SPI0_NSS	SPI0_NSS		FS_CEN				SPI_CEN	SPI_CEN2
PD1	SPI0_CLK	SPI0_CLK		FS_SCK				SPI_SCK	
PD2	SPI0_MOSI	SPI0_MOSI		FS_D0				SPI_D0	
PD3	SPI0_D3	SPI0_D3		FS_D3				SPI_D3	
PD4	DM	SPI0_D2		USB_DM				SPI_D2	
PD5	DP	SPI0_MISO		USB_DP				SPI_D1	
PD6	V33	SPI0_NSS	SPI_RSTN	USB_V33				SPI_CEN2	SPI_CEN
PD7	SPI0_MISO	SPI0_D4		FS_D1				SPI_D4	
PD8	SPI0_D2	SPI0_D7		FS_D2				SPI_D7	
PD9		SPI0_D6						SPI_D6	
PD10		SPI0_D5						SPI_D5	
PD11	TM26_OC1N	GPIO		RGB0_P2 (B)				SPI_AUX	
PD12	TM26_OC0H	GPIO		RGB0_P4 (R)				SPI_DQS	
PD13	TM26_OC1H			RGB0_P6 (G)				I2C_A0	SPI_RSTN
PD14	TM20_IC0							I2C_A1	IR_IN
PD15	IR_OUT							I2C_A2	IR_OUT

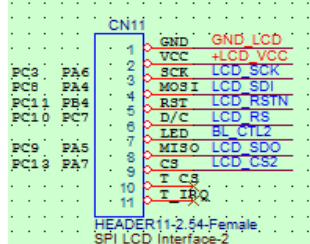
*1 : Output control directly by software mode register setting

*2 : Output from GPIO output pin

SPI LCD Module-1

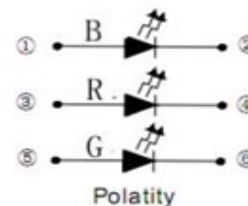
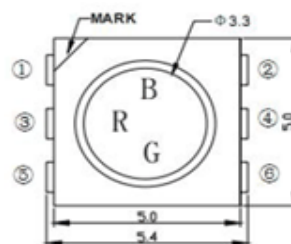


SPI LCD Module-2

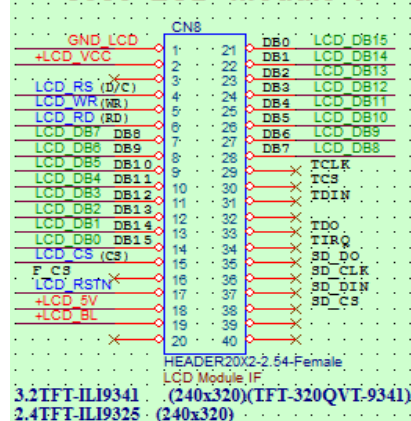


GTG5050RGBC

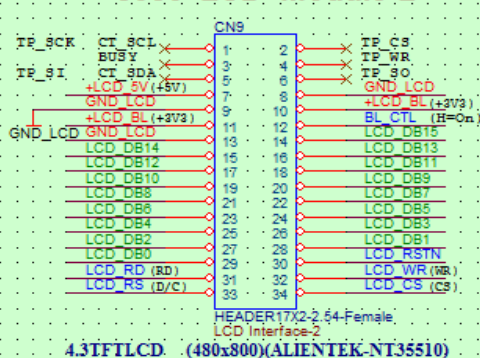
Intensity(mcd): R,G,B=300,600,300 ~ IF =200mA



8080 LCD Module-1



8080 LCD Module-2



$$Y=0.3R+0.59G+0.11B$$

(1) Res-B = Res-R/G * 3

or (2) R/G PWM on time

= B PWM on time * 3

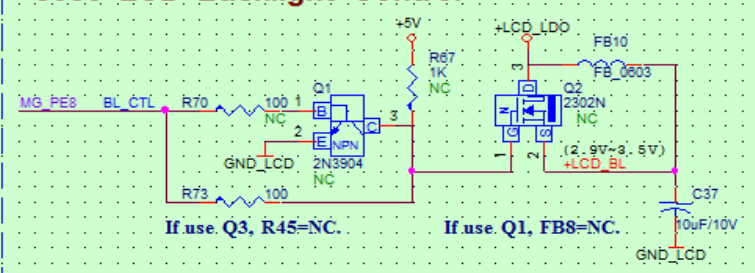
[RGB Serial Res Suggestion]

Res-B= 2.7K

Res-R= 1K

Res-G= 1K

8080 LCD Backlight Control



Shuttle Key

