

Port Map Worksheet: PIC32MX460F512L, MMB32 V1.1

Port A	5VT	HDR1	HDR2	Usage	Description
RA0	Y		9		
RA1	Y		10		
RA2/SCL2	Y		22		
RA3/SDA2	Y		23		
RA4	Y		11		
RA5	Y		12		
RA6	Y		13		
RA7	Y		14		
RA8	-			<i>No pin</i>	
RA9/Vref-/Cvref-/PMA7	N			LCD-BLED	LCD Backlight LED control.
RA10/Vref+/Cvref+/PMA6	N	14			
RA11 ... RA13	-			<i>No pin</i>	
RA14/SCL1/INT3	Y	12			
RA15/SDA1/INT4	Y	13			

Port B	5VT	HDR1	HDR2	Usage	Description
RB0/PGED1/AN0/CN2	N	3			
RB1/PGEC1/AN1/CN3	N	4			
RB2/AN2/C2IN-/CN4	N	5			
RB3/AN3/C2IN+/CN5	N	6			
RB4/AN4/C1IN-/CN6	N	7			
RB5/AN5/C1IN+/VBusOn/CN7	N	8			
RB6/PGEC2/AN6/OCFA	N	16			
RB7/PGED2/AN7	N	17			
RB8/AN8/C1OUT	N			MP3-BSYNC	
RB9/AN9/C2OUT	N			VSENSE	
RB10/AN10/VRefOut/PMA13	N			LCD-YD	Resistive Touch Screen, Y Lower
RB11/AN11/PMA12	N			LCD-XR	Resistive Touch Screen, X Right
RB12/AN12/PMA11	N			LCD-YU	Resistive Touch Screen, Y Upper
RB13/AN13/PMA10	N			LCD-XL	Resistive Touch Screen, X Left
RB14/AN14/PMALH/PMA1	N	9			
RB15/AN15/OCFB/PMALL/PMA0/CN12	N			LCD-RS	LCD Register Select

Port C	5VT	HDR1	HDR2	Usage	Description
RC0	-			<i>No pin</i>	
RC1/T2CK	Y			LCD-RST	LCD Reset Line
RC2/T3CK	Y			EE-CS#	Serial Flash Chip Select (Active Low)
RC3/T4CK	Y			STAT	
RC4/T5CK/SDI1	Y	15			
RC5 ... RC11	-			<i>No pin</i>	
RC12/OSC1	N			CLKI	8 MHz Crystal
RC13/SOSCI/CN1	N			SOSCI	32,768 Hz Crystal
RC14/SOSCO/T1CK/CN0	N			SOSCO	32,768 Hz Crystal
RC15/OSC2	N			CLKO	8 MHz Crystal

Port D

	5VT	HDR1	HDR2	Usage	Description
RD0/SDO1/OC1/INT0	Y		5		
RD1/OC2	Y		6		
RD2/OC3	Y		7		
RD3/OC4	Y		8		
RD4/OC5/PMWR/CN13	Y			PMWR	PM Bus Write Signal (Active Low)
RD5/PMRD/CN14	Y			PMRD	PM Bus Read Signal (Active Low)
RD6/PMD14/CN15	Y			PMD14	PM Data Bus
RD7/PMD15/CN16	Y			PMD15	PM Data Bus
RD8/RTCC/IC1	Y			MP3-DREQ	MP3 Chip Data Request
RD9/SS1/IC2	Y			MP3-RST#	MP3 Chip Reset (Active Low)
RD10/SCK1/IC3/PMCS2/PMA15	Y		15		
RD11/IC4/PMCS1/PMA14	Y		16		
RD12/IC5/PMD12	Y			PMD12	PM Data Bus
RD13/PMD13/CN19	Y			PMD13	PM Data Bus
RD14/U1CTS/CN20	Y		17		
RD15/U1RTS/CN21	Y		18		

Port E

	5VT	HDR1	HDR2	Usage	Description
RE0/PMD0	Y			PMD0	PM Data Bus
RE1/PMD1	Y			PMD1	PM Data Bus
RE2/PMD2	Y			PMD2	PM Data Bus
RE3/PMD3	Y			PMD3	PM Data Bus
RE4/PMD4	Y			PMD4	PM Data Bus
RE5/PMD5	Y			PMD5	PM Data Bus
RE6/PMD6	Y			PMD6	PM Data Bus
RE7/PMD7	Y			PMD7	PM Data Bus
RE8/INT1	Y	10			
RE9/INT2	Y	11			

Port F

	5VT	HDR1	HDR2	Usage	Description
RF0/PMD11	Y			PMD11	PM Data Bus
RF1/PMD10	Y			PMD10	PM Data Bus
RF2/U1RX	Y		21		
RF3/USBID	Y	18			
RF4/U2RX/PMA9/CN17	Y		19		
RF5/U2TX/PMA8/CN18	Y		20		
RF6 ... RF7	-			No pin	
RF8/U1TX	Y		22		
RF9 ... RF11	-			No pin	
RF12/U2CTS	Y			LCD-CS#	LCD Chip Select Line (Active Low)
RF13/U2RTS	Y			SD-CD#	Secure Digital Card Detect (Active Low)

Port G	5VT	HDR1	HDR2	Usage	Description
RG0/PMD8	Y			PMD8	PM Data Bus
RG1/PMD9	Y			PMD9	PM Data Bus
RG2/D+	N			D+	USB Data Bus
RG3/D-	N			D-	USB Data Bus
RG4 ... RG5	-			No pin	
RG6/SCK2/PMA5/CN8	Y	22		SCK2	SPI2 Clock
RG7/SDI2/PMA4/CN9	Y	23		SDI2	SPI2 MISO
RG8/SDO2/PMA3/CN10	Y	24		SDO2	SPI2 MOSI
RG9/SS2/PMA2/CN11	Y			SD-CS#	Secure Digital Card Select (Active Low)
RG10 ... RG11	-			No pin	
RG12	Y	19			
RG13	Y	20			
RG14	Y	21			
RG15	Y			MP3-CS#	MP3 Chip Select (Active Low)

Other	5VT	HDR1	HDR2	Usage	Description
Left	-		3	Left	Left Audio Output
Right	-		4	Right	Right Audio Output
Vcc 3.3v	-	25	25	Vcc 3.3v	Power from internal regulator
Vcc 5.0v	-	1		Vcc 5.0v	External power or Vbus from USB
Vss	-	2,26	2,26	Vss	Ground
Reset#	Y		1	MCLR	The PIC32 reset line (Active Low)

Legend

Pin available or sharable
Pin used internally
Pin invalid or unavailable

5VT: Y means this pin can tolerate up to 5V in input mode. N means the input must never exceed Vdd.
HDR1 and HDR2 refer to the two 26-pin single-in-line header connections.
CN1 and CN9 refer to the debug/programming ports.

Notes:

References to the JTAG and TRACE interfaces are omitted.
The Secure Digital Card and Serial Flash chip both utilize SPI port 2. This port is available for expansion.

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