

DT024CTFT (-TS) to PIC32MX series Pin Connections (IL19341), 6/27/2016

Display Connections		PIC32MX Connections							
Pin	Function	MCU Parallel				MCU Serial		RGB Serial	
		8080 I 8-bit Bus	8080 I 9-bit Bus	8080 I 16-bit Bus	8080 I 18-bit Bus	8-bit Serial I (SDA+D/CX)	8-bit Serial II (SDI+SDO+D/CX)	16-bit RGB with 8-bit Serial II	18-bit RGB with 8-bit Serial II
1	NC	NC	NC	NC	NC	NC	NC	NC	NC
2	IM0	VSS (GND)	VSS (GND)	VDD	VDD	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)
3	IM1	VSS (GND)	VDD	VSS (GND)	VDD	VDD	VDD	VDD	VDD
4	IM2	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VDD	VDD	VDD	VDD
5	IM3	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VDD	VDD	VDD
6	RESET	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO
7	VSYNC	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	GPIO	GPIO
8	HSYNC	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	GPIO	GPIO
9	DOTCLK	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	GPIO	GPIO
10	ENABLE (DE)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	GPIO	GPIO
11	DB17	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	GPIO	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD15	PMD17 (Not supported on PIC PMP)
12	DB16	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	GPIO	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD14	PMD16 (Not supported on PIC PMP)
13	DB15	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD15	PMD15	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD13	PMD15
14	DB14	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD14	PMD14	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD12	PMD14
15	DB13	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD13	PMD13	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD11	PMD13
16	DB12	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD12	PMD12	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD12
17	DB11	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD11	PMD11	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD10	PMD11
18	DB10	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD10	PMD10	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD9	PMD10
19	DB9	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD9	PMD9	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD8	PMD9
20	DB8	VDD OR VSS (GND)	PMD8	PMD8	PMD8	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD7	PMD8
21	DB7	PMD7	PMD7	PMD7	PMD7	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD6	PMD7
22	DB6	PMD6	PMD6	PMD6	PMD6	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD5	PMD6
23	DB5	PMD5	PMD5	PMD5	PMD5	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD4	PMD5
24	DB4	PMD4	PMD4	PMD4	PMD4	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD3	PMD4
25	DB3	PMD3	PMD3	PMD3	PMD3	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD2	PMD3
26	DB2	PMD2	PMD2	PMD2	PMD2	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD1	PMD2
27	DB1	PMD1	PMD1	PMD1	PMD1	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD0	PMD1
28	DB0	PMD0	PMD0	PMD0	PMD0	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	PMD0
29	SDO	NC	NC	NC	NC	NC	SDIx (MISO)	SDIx (MISO)*	SDIx (MISO)*
30	SDI (SDA)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	GPIO (Bit Bang)	SDOx (MOSI)	SDOx (MOSI)*	SDOx (MOSI)*
31	RD	PMRD	PMRD	PMRD	PMRD	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)	VDD OR VSS (GND)
32	RS/SCL (Parallel D/CX)	GPIO	GPIO	GPIO	GPIO	GPIO (Bit Bang)	SCKx	SCKx*	SCKx*
33	WR (Serial D/CX)	PMWR	PMWR	PMWR	PMWR	GPIO (Bit Bang)	GPIO (Serial D/CX)	GPIO (Serial D/CX)*	GPIO (Serial D/CX)*
34	CS	GPIO	GPIO	GPIO	GPIO	GPIO (Bit Bang)	GPIO (CS)	GPIO (CS)*	GPIO (CS)*
35	FMARK (TE)	INTx	INTx	INTx	INTx	INTx	INTx	NC	NC
36	VDD	VDD	VDD	VDD	VDD	VDD	VDD	VDD	VDD
37	VDD	VDD	VDD	VDD	VDD	VDD	VDD	VDD	VDD
38	GND	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)
39	GND	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)	VSS (GND)
40	LEDA	VLED	VLED	VLED	VLED	VLED	VLED	VLED	VLED
41	LEDK	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO
42	NC/XR	ANx	ANx	ANx	ANx	ANx	ANx	ANx	ANx
43	NC/YD	ANx	ANx	ANx	ANx	ANx	ANx	ANx	ANx
44	NC/XL	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO
45	NC/YU	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO	GPIO

* For RGB, it is recommended that these connections are made to the MCU for configuration through SPI (Hor/Ver vsync, Hor/Ver hsync, blanking interval, etc) otherwise defaults are used.