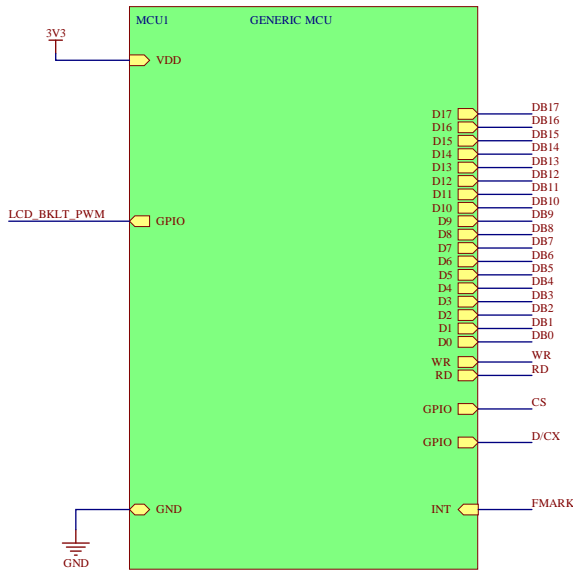
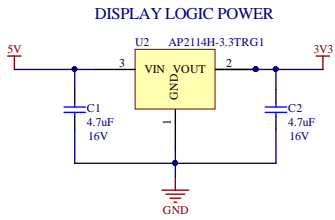


# DT024CTFT MCU Reference Design

(MCU PARALLEL 18-BIT IMAGE AND CONFIGURATION DATA)

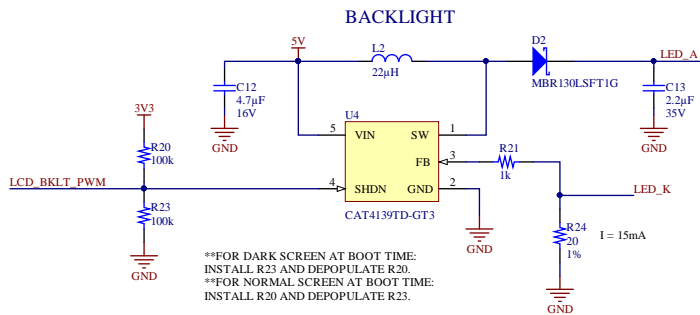
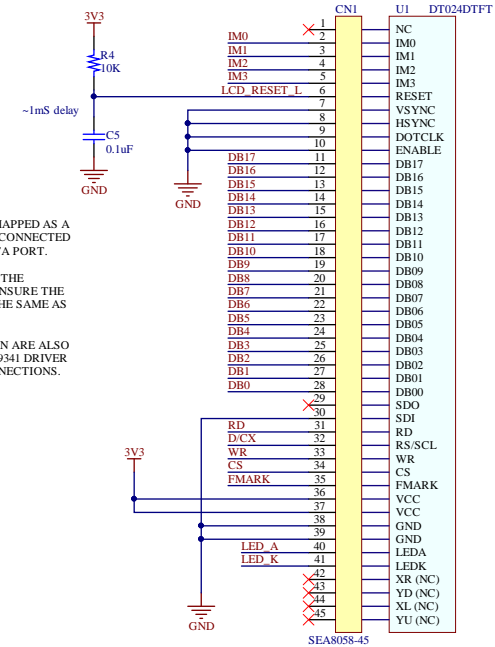


IN MCU MODE, THE DISPLAY IS MAPPED AS A PARALLEL MEMORY DEVICE OR CONNECTED TO A DEDICATED PARALLEL DATA PORT.

CONSULT THE DATA SHEET FOR THE PARTICULAR MCU CHOSEN TO ENSURE THE LCD DATA CONNECTIONS ARE THE SAME AS THIS EXAMPLE.

16-BIT AND 8-BIT MCU OPERATION ARE ALSO POSSIBLE. SEE THE MCU AND IL9341 DRIVER DATA SHEETS FOR PROPER CONNECTIONS.

FMARK SIGNAL INDICATES THE BEGINNING OF A NEW IMAGE FRAME. IT CAN BE USED TO AVOID IMAGE TEARING.



\*\*FOR DARK SCREEN AT BOOT TIME: INSTALL R23 AND DEPOPULATE R20.  
 \*\*FOR NORMAL SCREEN AT BOOT TIME: INSTALL R20 AND DEPOPULATE R23.

DT024DTFT Interface Mode Settings (MCU)

IM3	IM2	IM1	IM0	Interface Mode	Pins
0	0	0	0	8-bit parallel bus	D[7:0] + WR + RD + D/CX
0	0	0	1	16-bit parallel bus	D[15:0] + WR + RD + D/CX
0	0	1	0	9-bit parallel bus	D[8:0] + WR + RD + D/CX
0	0	1	1	18-bit parallel bus	D[17:0] + WR + RD + D/CX

LOGIC 1 = VDD (3.3V)  
 LOGIC 0 = GND

CHIP SELECT (CS) SIGNAL IS USED TO SELECT DISPLAY IF DATA BUS IS SHARED WITH OTHER DISPLAYS OR MEMORY DEVICES.