

Fixed pins: GSCLK (PB0), SIN (PB3), SCLK (PB5)
Remappable pins: BLANK (PB2), XLAT (PB1), DCPRG (PC3), VPRG (PC5)
Optional pins (see documentation): DCPRG (PC3), VPRG (PC5)
Restricted pins (see below): PB2, PB4

Pins marked "remappable" in the above list may be remapped to unused pins, or swapped with other remappable pins in the Makefile configuration.

Due to hardware limitations when using this SPI mode, PB2 must always remain an output pin, and PB4 must always remain an input pin, but both may be used for other purposes as long as those conditions are met.

Makefile configuration:
TLC5940_N = 1
TLC5940_ENABLE_MULTIPLEXING = 0
TLC5940_SPI_MODE = 0
BLANK_PIN = PB2
XLAT_PIN = PB1
DCPRG_PIN = PC3
VPRG_PIN = PC5

For optimal performance, BLANK_PIN and XLAT_PIN should belong to the same PORT.

R1 is optional, but protects against accidental resets due to noise.

D1 is optional, but provides ESD protection for the RESET pin.

C2 is optional, but provides additional noise protection for the RESET pin. (If debugWire or PDI is being used, C2 cannot be present.)

Q1, C3, and C4 are optional if the fuse bits are changed appropriately to use the internal oscillator.