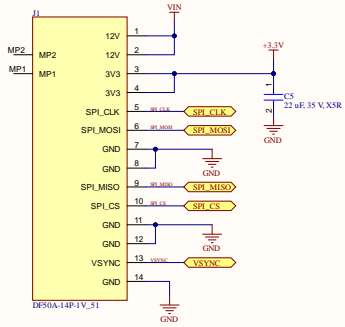


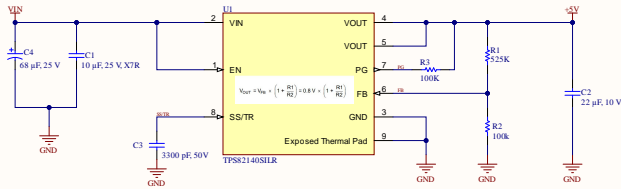
DESIGN NOTES:

1. The LED dot matrix shall use a Texas Instruments LP5860 driver, provided by AR, to individually address each LED
2. The LED dot matrix shall be controlled by a SPI interface coming from the front HMI controller developed by AR
3. The LED dot matrix shall be provided 12VDC. The 12V rail should be reduced to 5V through a suitable DC/DC module, such as the Texas Instruments TPS82140, and the resulting 5V rail shall be used to supply the LP5860's VLED pin.
4. The LED dot matrix shall also be provided 3.3VDC for VCC and VIO_EN. Assume this source is noisy and ensure proper filtering/decoupling is in place.
5. The LED dot matrix shall follow the pinout as per the specs

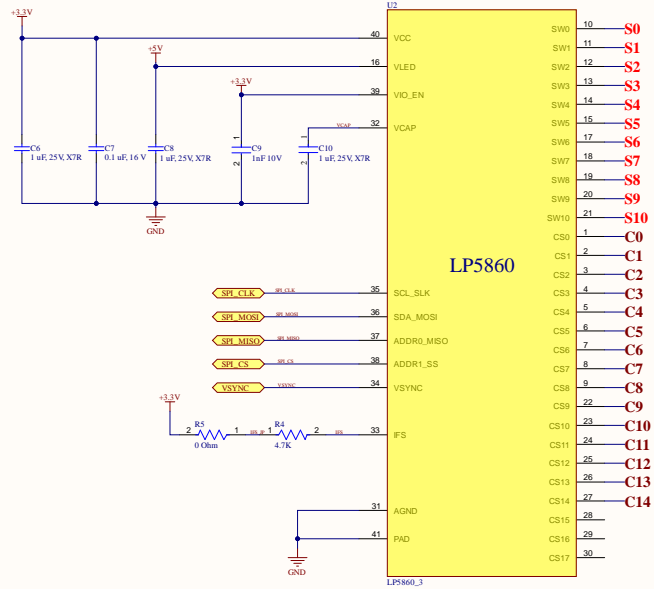
INPUT CONNECTOR



DC-DC CONVERTER



LED MATRIX CONTROLLER SPI MODE



LED MATRIX

