

## Premise

SightLine Applications has developed a precision visual landing aid for UAV's. The Landing Aid supports autonomous landing operations by automatically finding and tracking an easy to place landing pattern. Integration of the SightLine Landing Aid for end users is problematic for two main reasons:

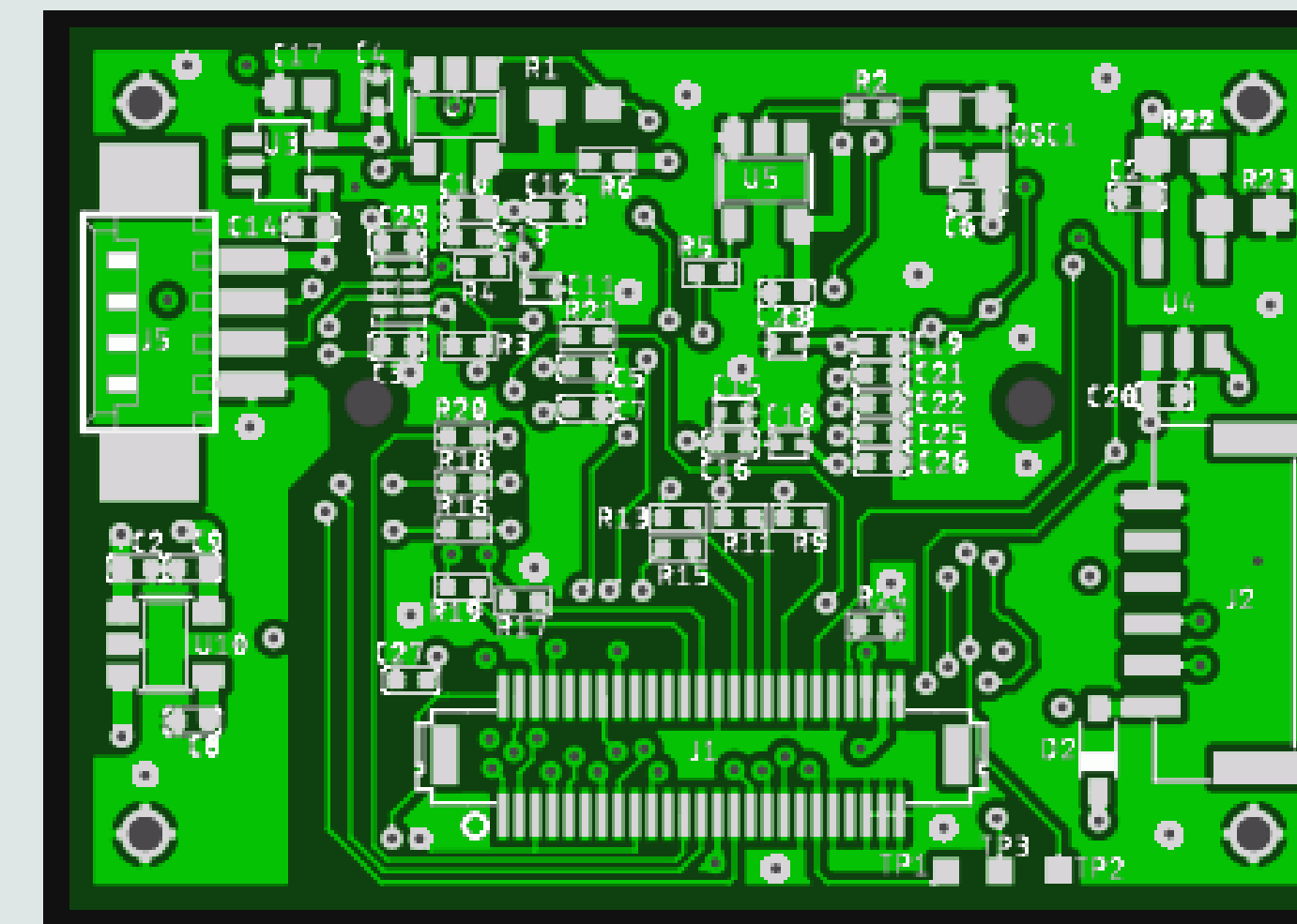
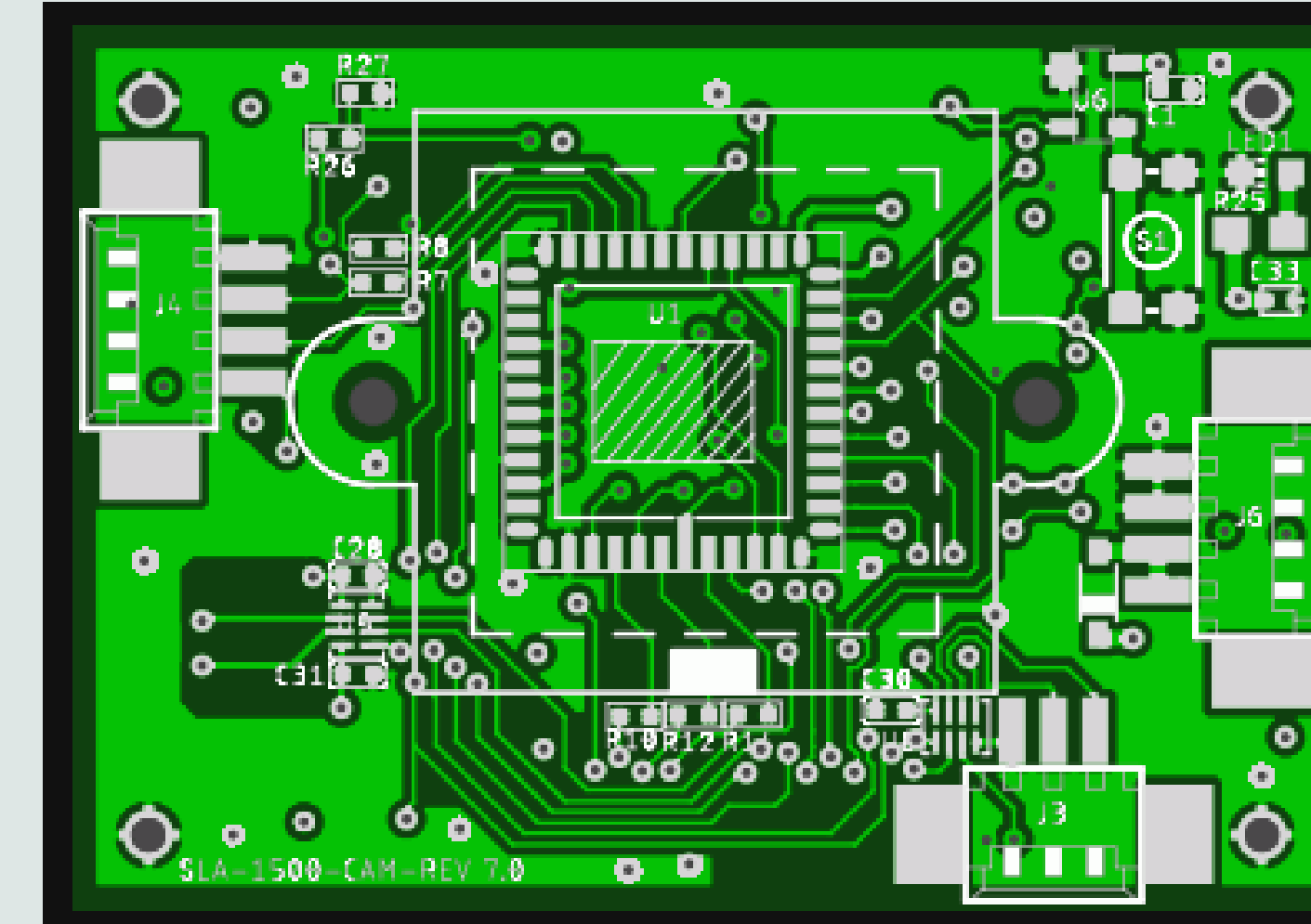
I. Connectivity issues with a wide range of cameras.

II. Communication issues with a wide range of flight controller hardware and software.

Currently the end user selects a camera to be used with the SightLine processing hardware. A wide range of cameras must be supported, and custom A/B boards must be designed for each one to interface with the SightLine hardware. Each of these A/B boards can have cable, power, and electrical connectivity issues that are problematic for the end user. There is also a wide range of flight controller hardware and software, each with a myriad of different communication protocols. Installing software components to facilitate this communication is fine for the end user, but if any programming needs to be done this is usually a complete show stopper. The proposed solution to these problems is to develop an all in one unit with plug and play capabilities that can be directly connected to a consumer level flight controller. By doing so camera connectivity and selection problems are eliminated, and communication and software deployment are made much easier for the end user.

## Quad-copter

## Hardware



## Software