# Completed PCB Work

A couple of examples of my work are shown below. To date, I have developed designed in Protel99SE, Altium Designer 10, Altium Circuit Maker, Proteus 8 Pro and Kicad. Whilst Altium Designer is my desirable package, it is also the most expensive, and Kicad is becoming my new standard interface for new work.

1) Analogue Injection PCB - Unit for test and calibration of rack-mount control hardware. Design contains sensitive precision analogue components and required isolation from three high-frequency Switching PSU modules and a microcontroller . Guard rings were provided also for EMC shielding. Multi-page Schematic and 4-Layer PCB developed using Proteus 8 Professional.

Client information and board revisions removed for confidentiality
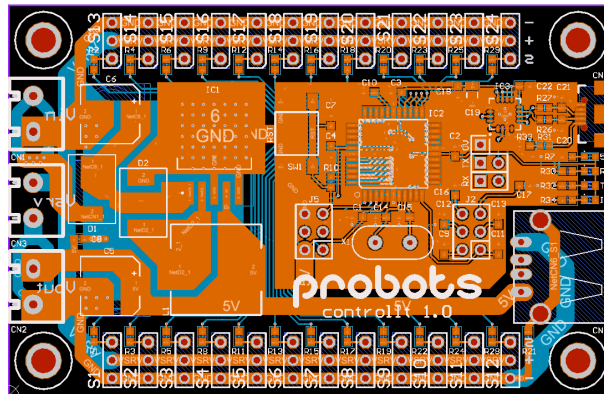
PCB Design
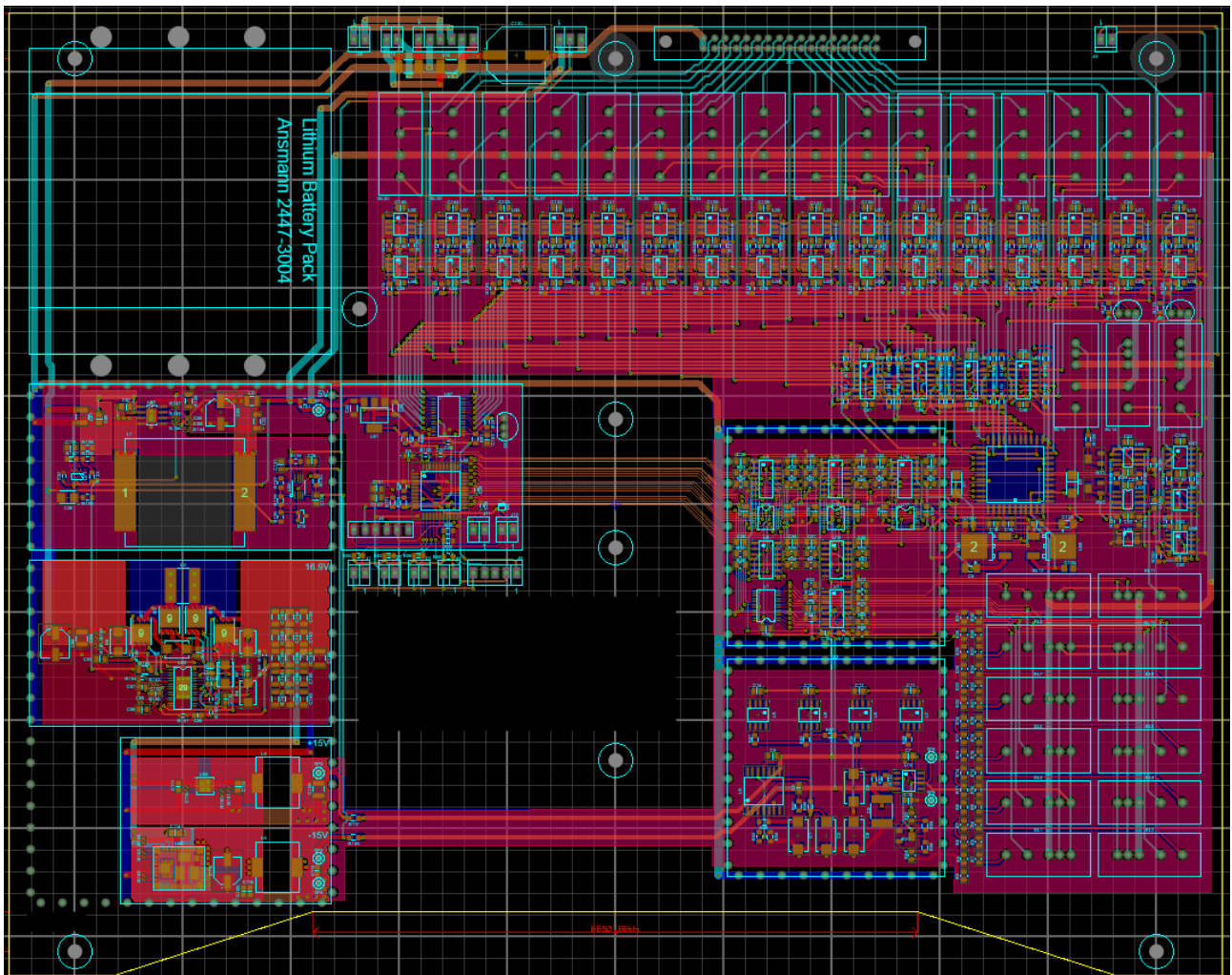
Hand-built prototype v1
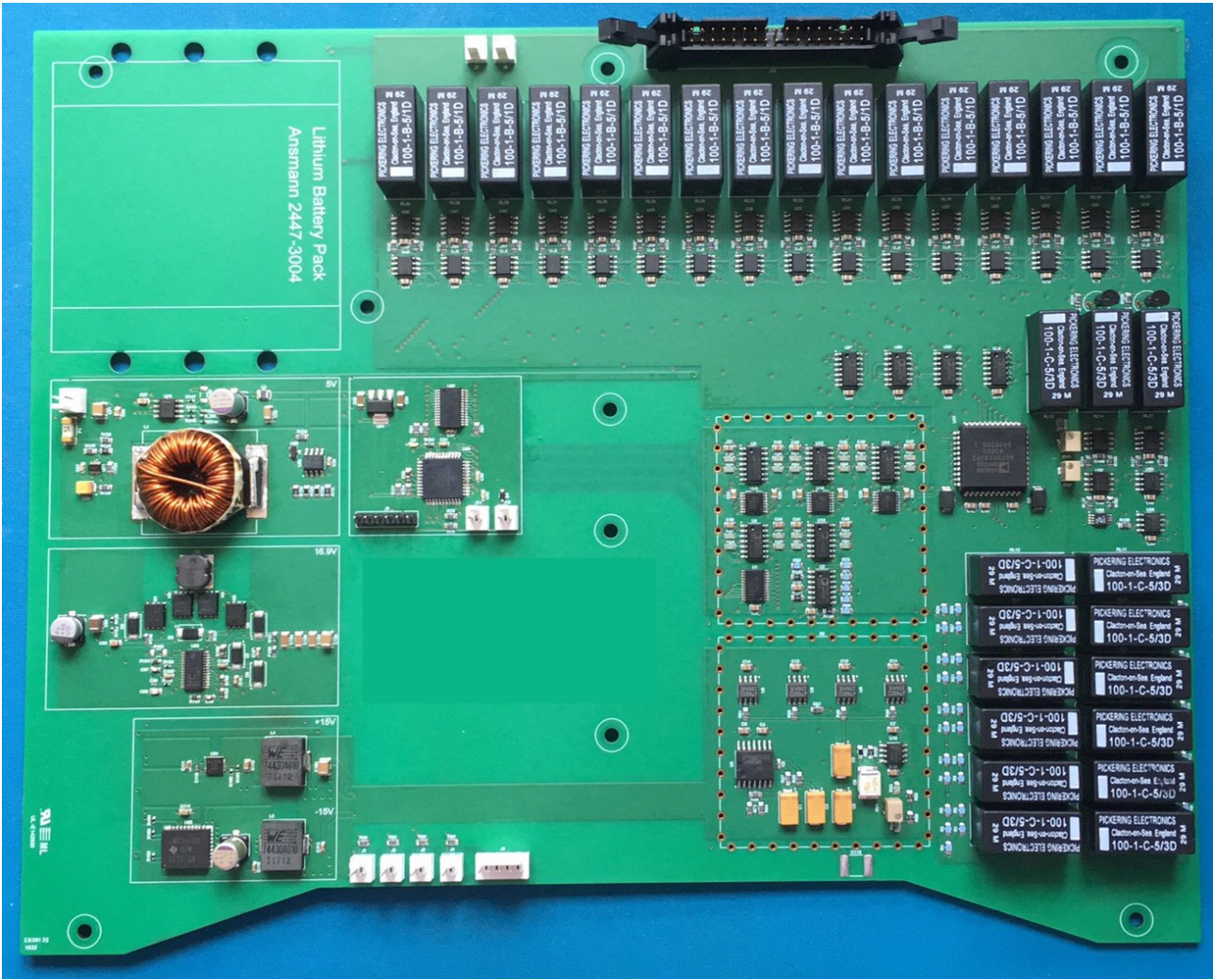
2) <u>Servo control unit with integrated 3A PSU</u> – developed for robotics applications, this is a compact controller with large current paths for high-stall current servos and connected computers (Raspberry Pi etc). Capable of simultaneously controlling 24 Servos under host computer control (USB or Serial TTL). Schematics and 2-Layer PCB developed using Altium Circuit Maker. Designed for ProBots – www.probots.co.uk/cubecart/index.php

PCB Design

Prototype