

The Las Vegas Boulevard Tracker Interface

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Introduction

- A satellite antenna rotator interface
- For use with Yaesu/Kenpro G5400/5500/5600 series rotators

Topics of Discussion

- Why do we need another rotator tracking interface?
- The Las Vegas Boulevard Tracker

Why do we need another rotator interface?

- Hardware PC interfaces have changed but rotator interfaces haven't
- Kansas City Tracker – ISA slot
- Many others use COM ports or LPT ports
- USB is a new standard
- TCP/IP is now a de facto standard

The ISA Slot/COM/LPT port problem

- ISA slots are non-existent in new PCs
- COM (RS-232) ports are becoming less common in new equipment, laptops in particular
- LPT ports also less common, and also difficult to program control signals from applications under newer OS's
- Lack of interrupts on PCs!

USB – The ‘new’ standard

- USB is now very common
- Traditionally very difficult to develop USB drivers, so only economically viable for large volumes
- Each OS has a completely different driver model

TCP/IP over Ethernet

- Almost universal standard
- Permits distributed location of equipment

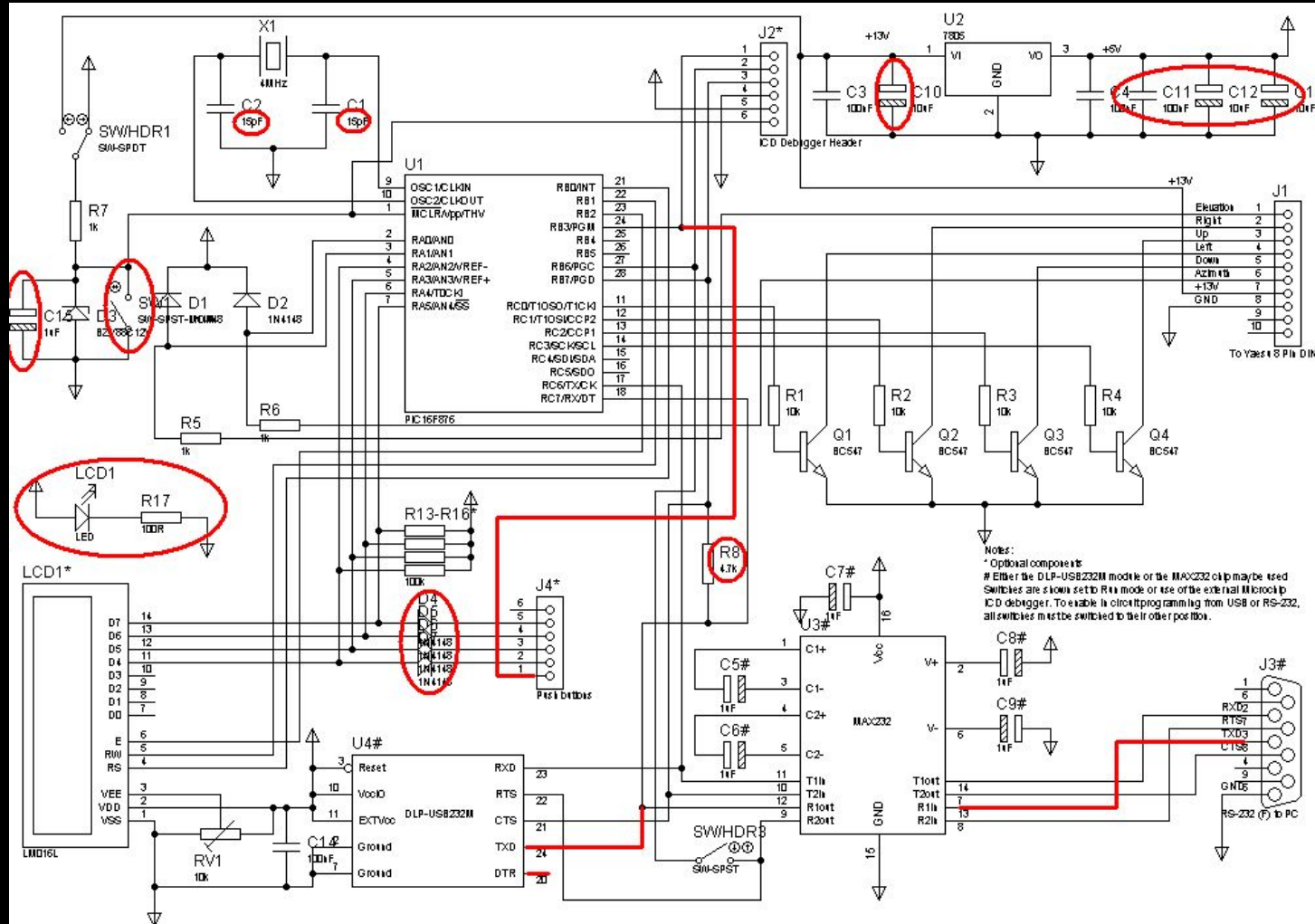
The Las Vegas Boulevard Tracker - 1

- Physical development mostly over past two months
- Most of the thought process and initial considerations compiled on vacation

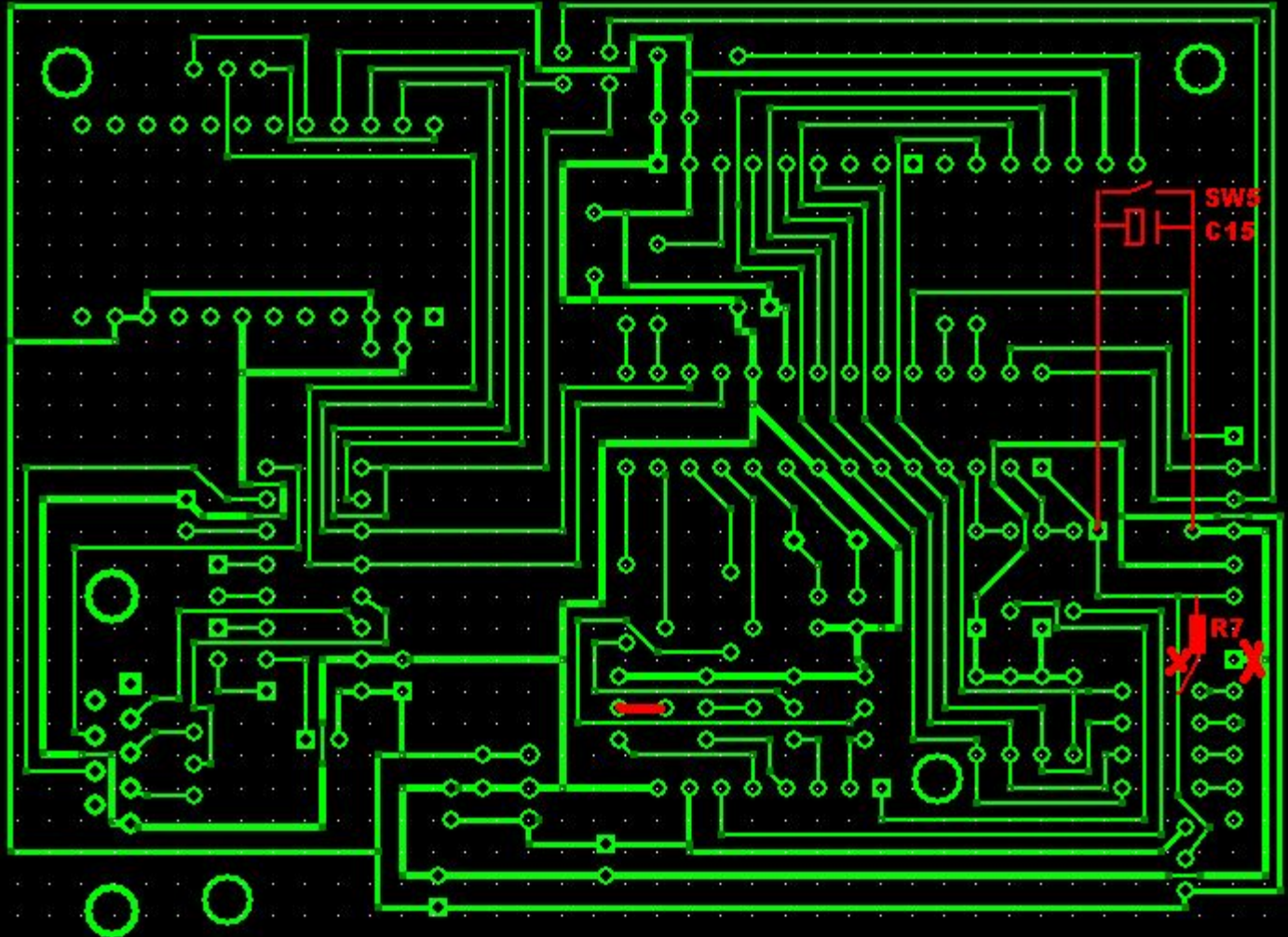
The LVB Tracker - 2

- Provides multiple hardware interface options
 - ◆ RS-232, USB, TCP/IP over Ethernet
- Compatible with EasyComm and Yaesu GS-232 software protocols
- Integrated on board microcontroller programmer
- Optional LCD display and buttons
- Cross platform support – Linux, Open BSD, Free BSD, Windows 98, ME, 2000, XP, Mac OS-8, OS-9 and OS-X
- Open source microcontroller code

Bugs - 1



Bugs - 2



How much?

- Basic RS-232: £12+PCB
- USB: £17+PCB
- TCP/IP Ethernet: £47+PCB
- Optional LCD: £10
- Optional Buttons: £4