



OSC Device Design Space

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General vs. Special Purpose

- Current OSC devices are
 - general purpose
 - physically large
 - over \$100
 - a bargain!

Special Purpose

- Lots of applications need something
 - cheaper, many performers
 - smaller: dance, wearable
 - faster than MIDI: reactivity

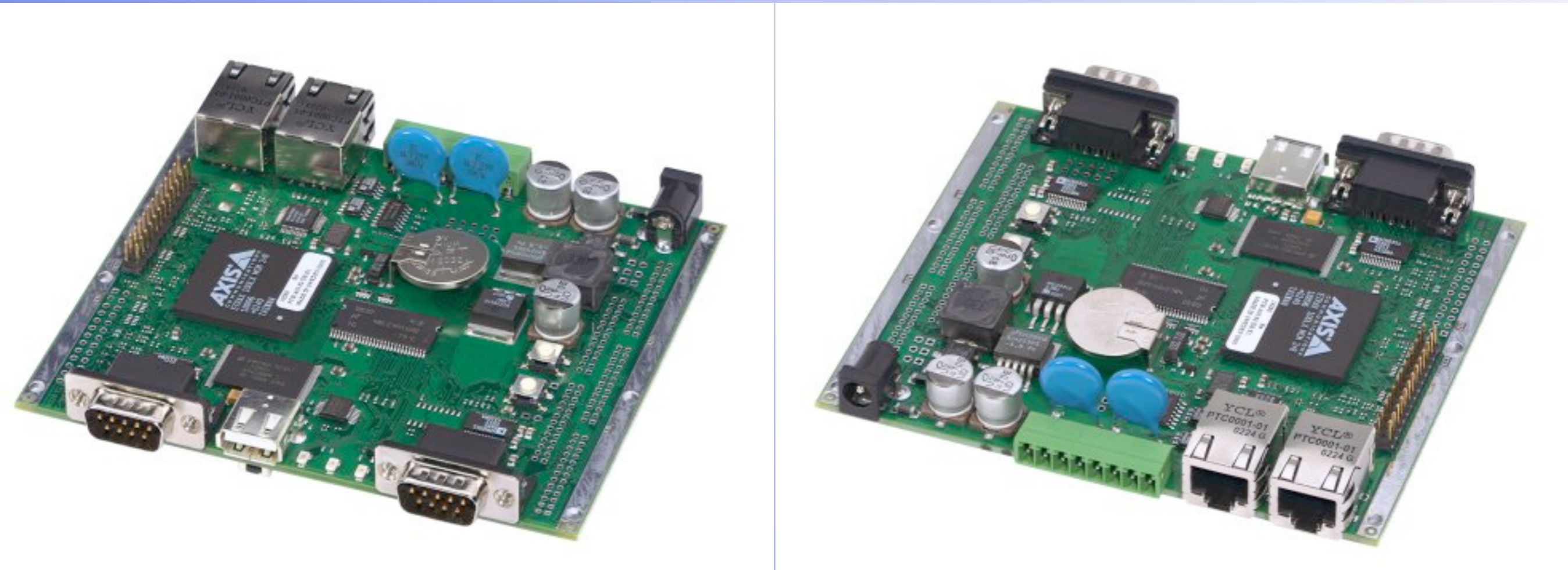
OSC Hardware Kit

- Affordable ~\$100 vs \$1000
- Supports sensing and control
- Rapid Prototyping, customizable
- Readily available
- Simple things simple
- Fast enough
- Compact

Some Candidates

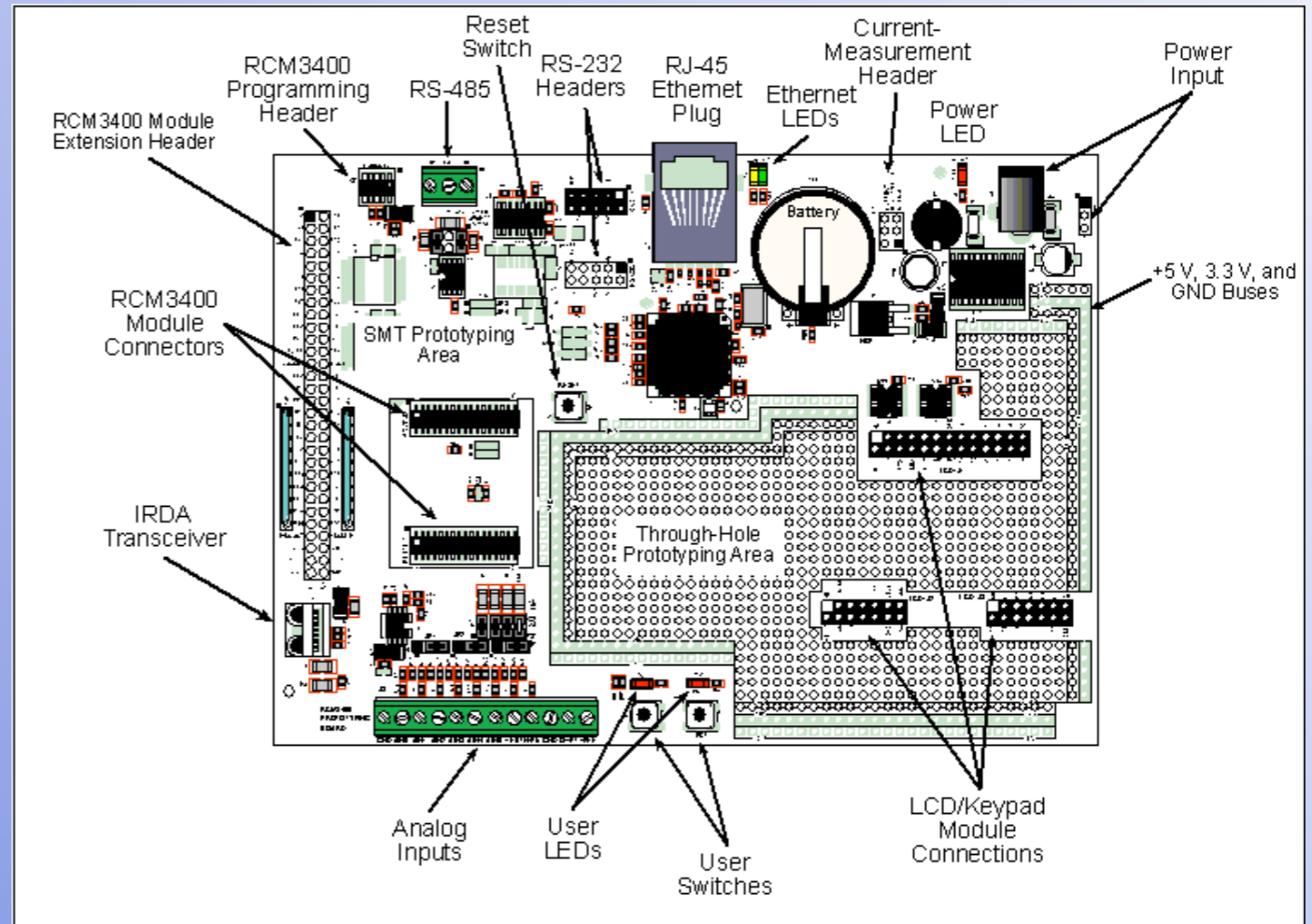
- “pic” and other 8-bit controllers
- Axis embedded linux box
- Rabbit 3000 modules
- USB modules
- uCLinux embedded controller
- PDA or cellphone
- custom FPGA based design

Axis



- Stable Supplier, Open source uClinux
- \$289
- Expansion ports but no A/D

Rabbit 3000series



- Stable Supplier
- tcp/ip code, OS and compiler included
- \$340+ \$59/module
- Analog in, prototyping, IR, encoders

USB

Stable Supplier

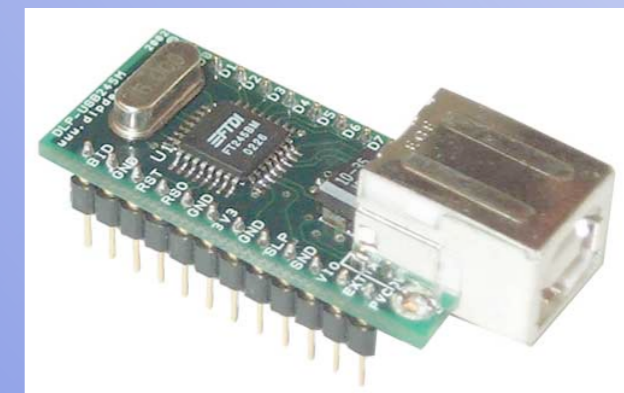
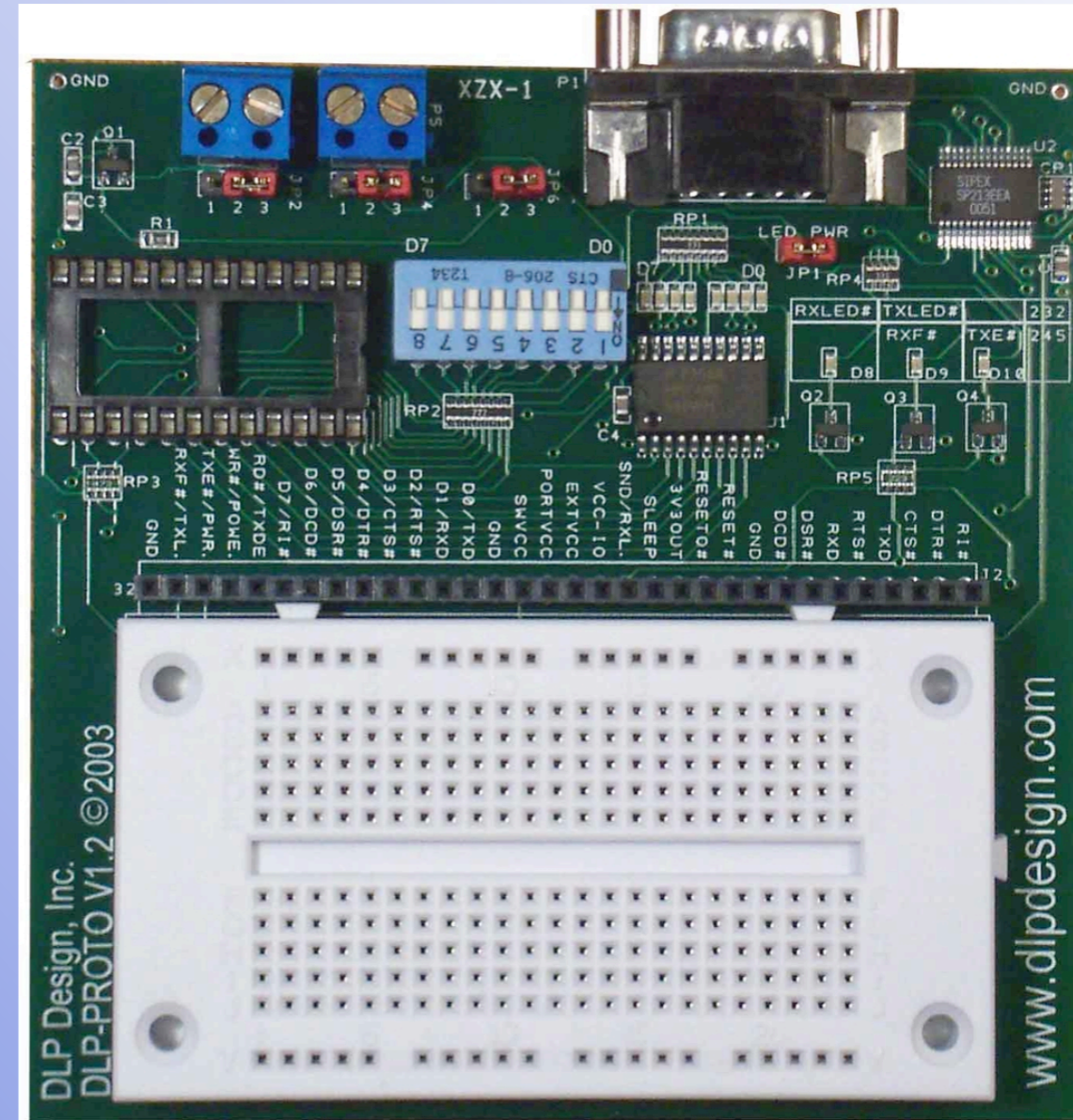
USB serial emulation
drivers

\$90+ \$30/module

no Analog in, prototyping

faster than MIDI

slower than Ethernet



Working Group

- Please contact me if you are interested in
 - owning an OSC hardware kit
 - joining the “OSC devices” working group
 - suggesting further platforms
 - describing your needs
 - sponsoring this work
- adrian@cnmat.berkeley.edu