

thingSoC

Open Source Sockets
for
the Internet of Things



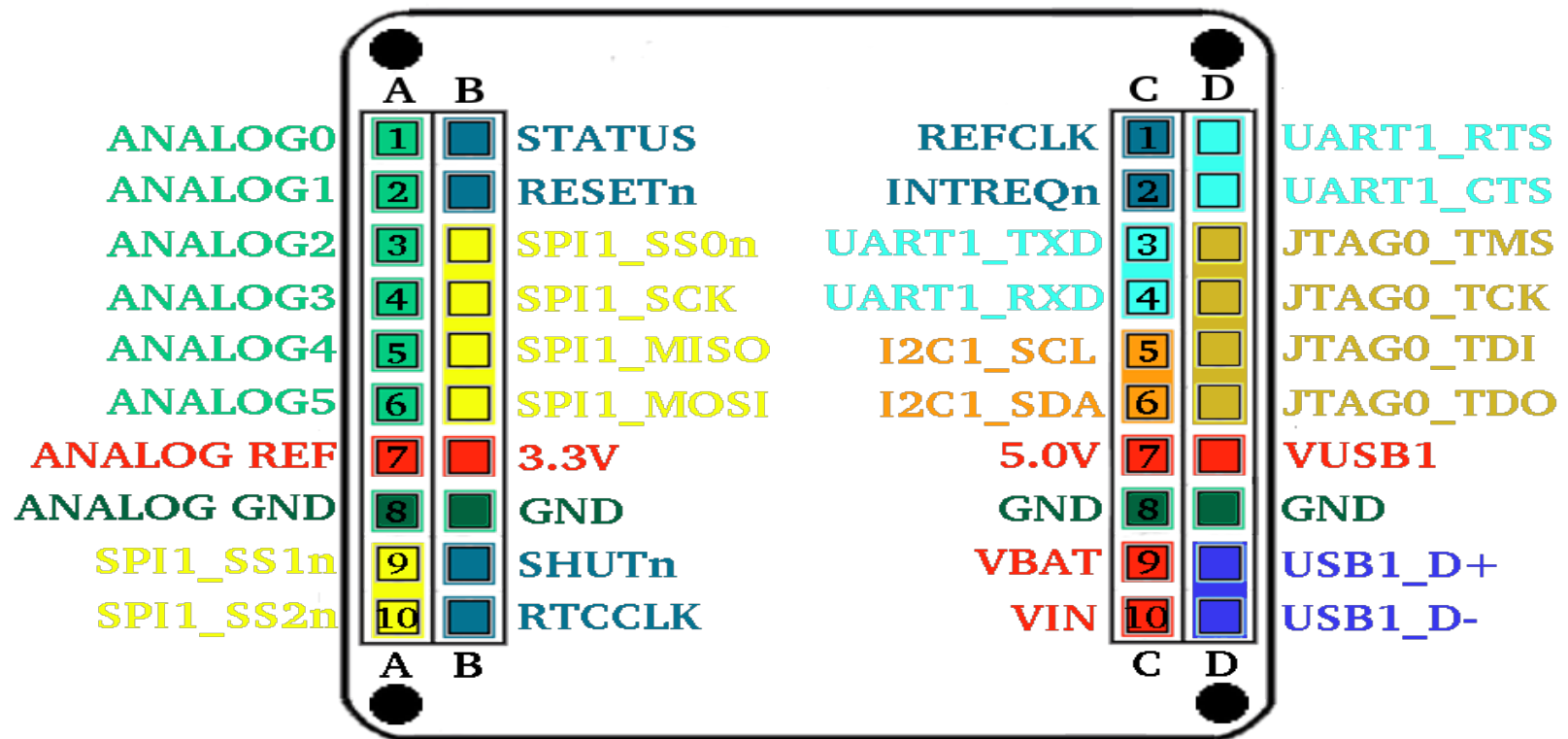
Tom Moxon
@PatternAgents

thingSoC initiative

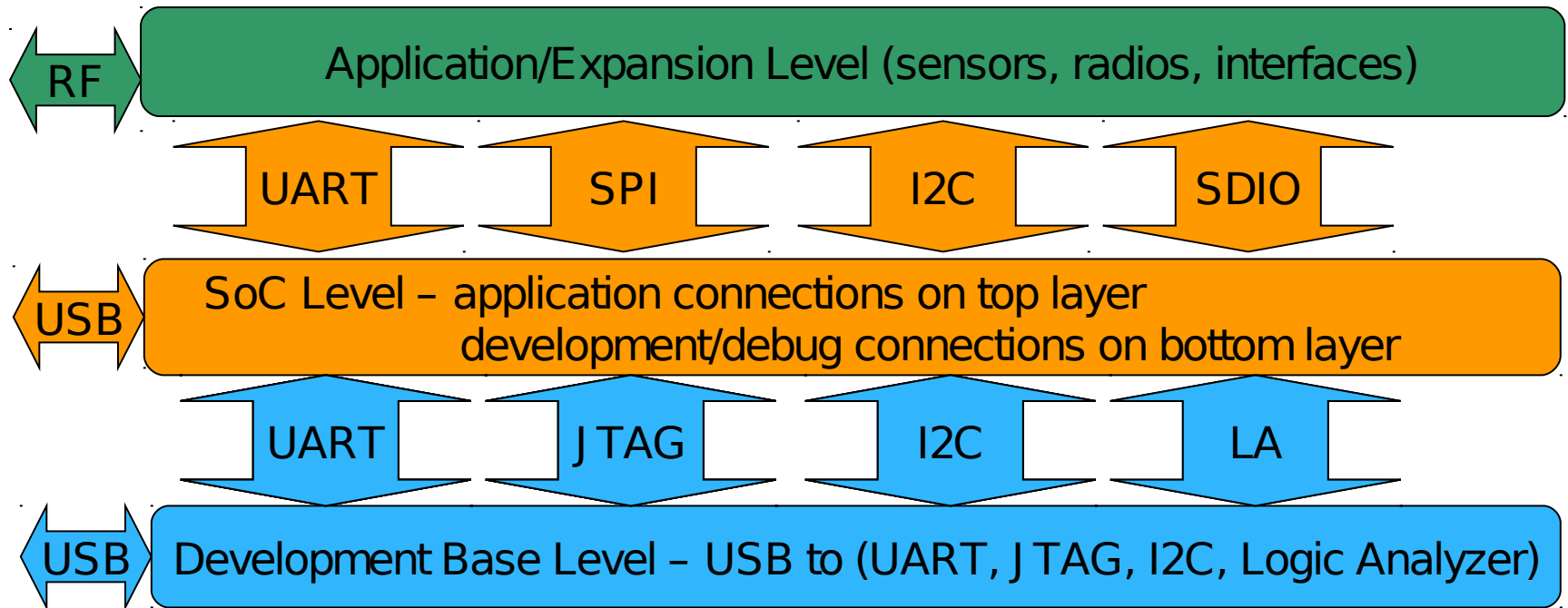
- * <http://www.thingsoc.com>
- * Open Source Sockets for the Internet of Things (OPEN)
- * A rapid development platform for IoT applications (FAST)
- * Auto-Identifies Add-Ons & Options for ease of use (EASY)
- * Builds in Test modes and Instrumentation (RELIABLE)

Common/Needed Interfaces

thingSoC IoT Sockets



thingSoC Stacking Levels



* Interfaces at known pins allow for easy test fixture setup and automation

thingSoC App layers

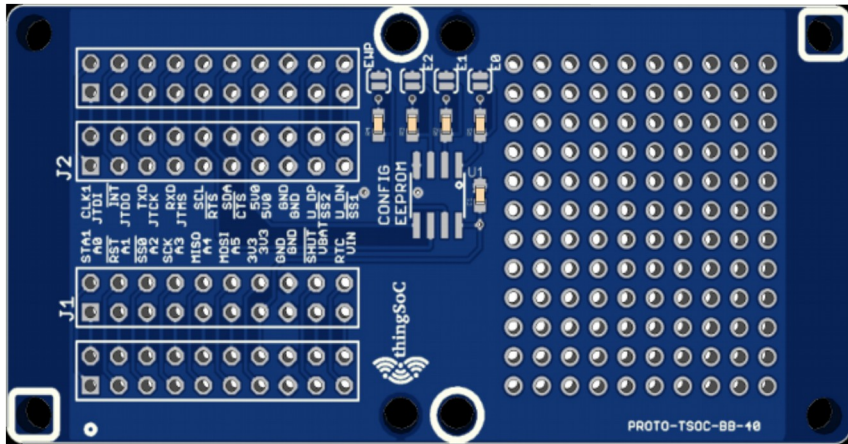
- * Socket/IF for RF modules (Bluetooth, Wi-Fi, Cellular, Packet)
- * Socket/IF for Specialized interfaces (Motors, Sensors, etc.)
- * Socket/IF for other platforms (iPad, RaspPi, Beagle, Arduino)
- * Open Source Hardware standard for socket interfaces

ThingSoC is Unique...

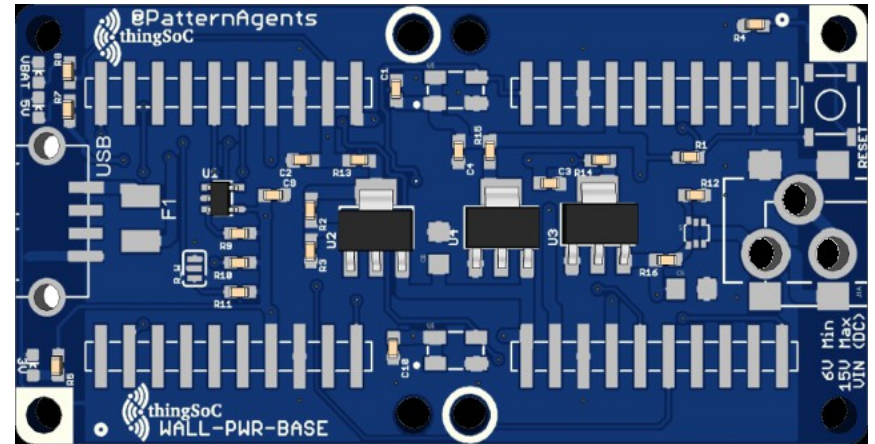
- * Adds the concept of Built-In Testing Automation (i.e. hooks for “IEC safe operation” and “continuous testing”)
- * Logic Analyzer/O-Scope Bus - an “instrumented platform”
- * Reusable Middleware – just change the application layers
- * Working on Radio & RF Stack interfaces (Contiki/Rime, RadioHead, and Proprietary RF Stacks)

ThingSoC Reference Designs

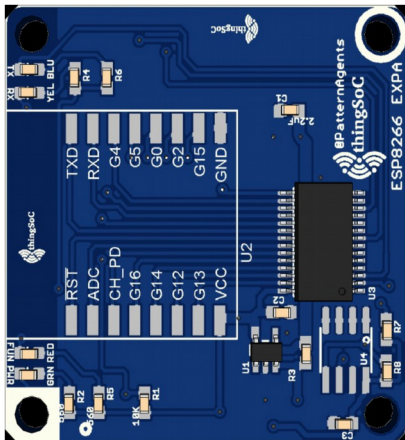
Prototyping



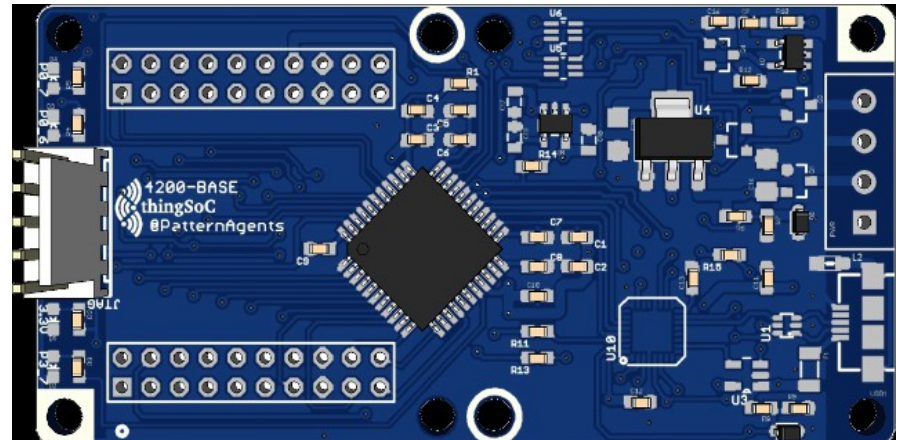
Power



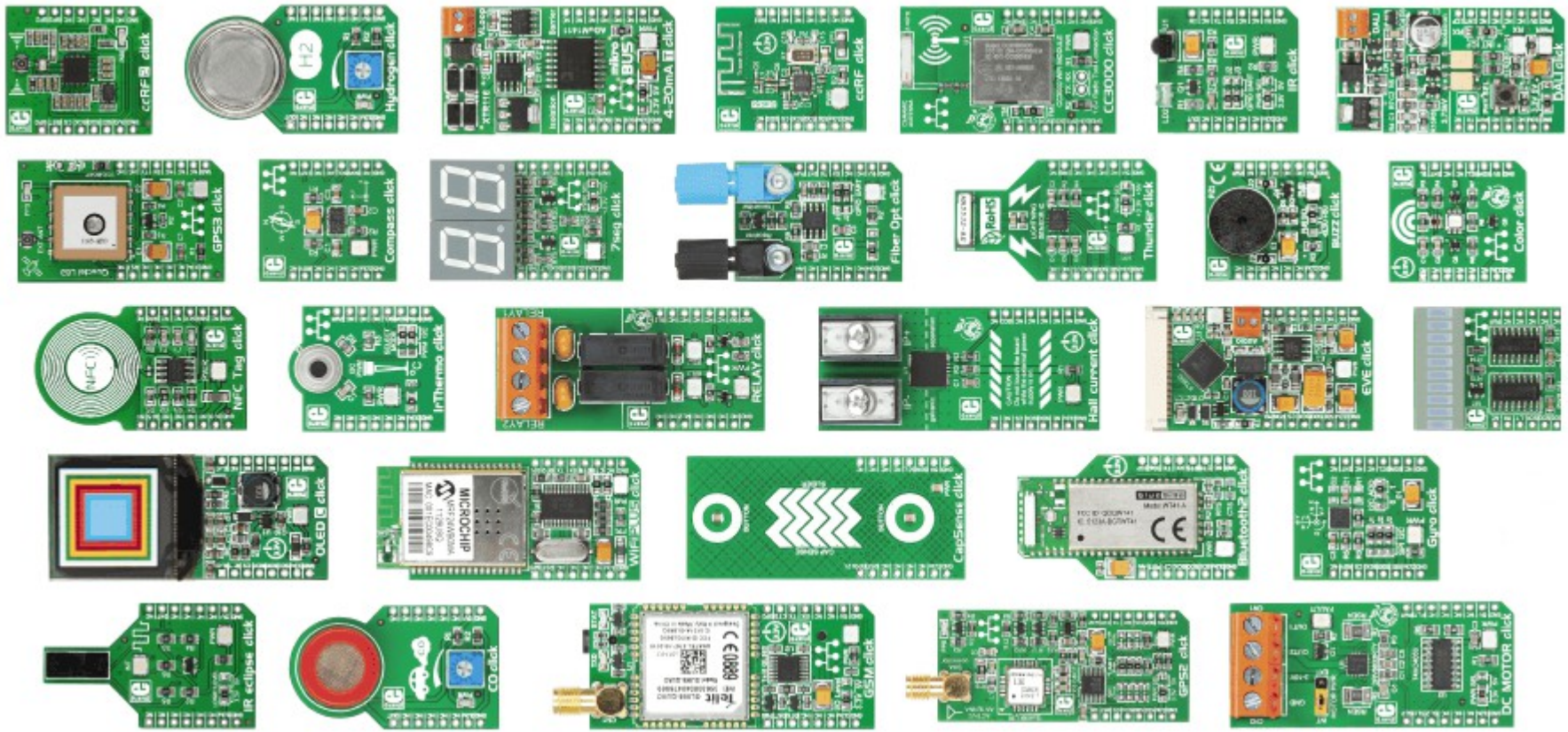
Wi-Fi ESP8266



Arduino / PSoC



Compatible with Mikroe“Click”



Over 100 “Click” Interfaces are already available and ready for purchase...

Please Help

- * thingSoC is community supported -
<https://github.com/thingsoc>
- * Suggestions/Comments :
 - tell us what you'd like...
(community feedback prioritizes what we do next)
 - ask questions about applications and using it...
(someone may be working on what you need already)
- * Propose a hardware/software component of your own...
(other interested members might be willing to help)

Thank You !

Questions?