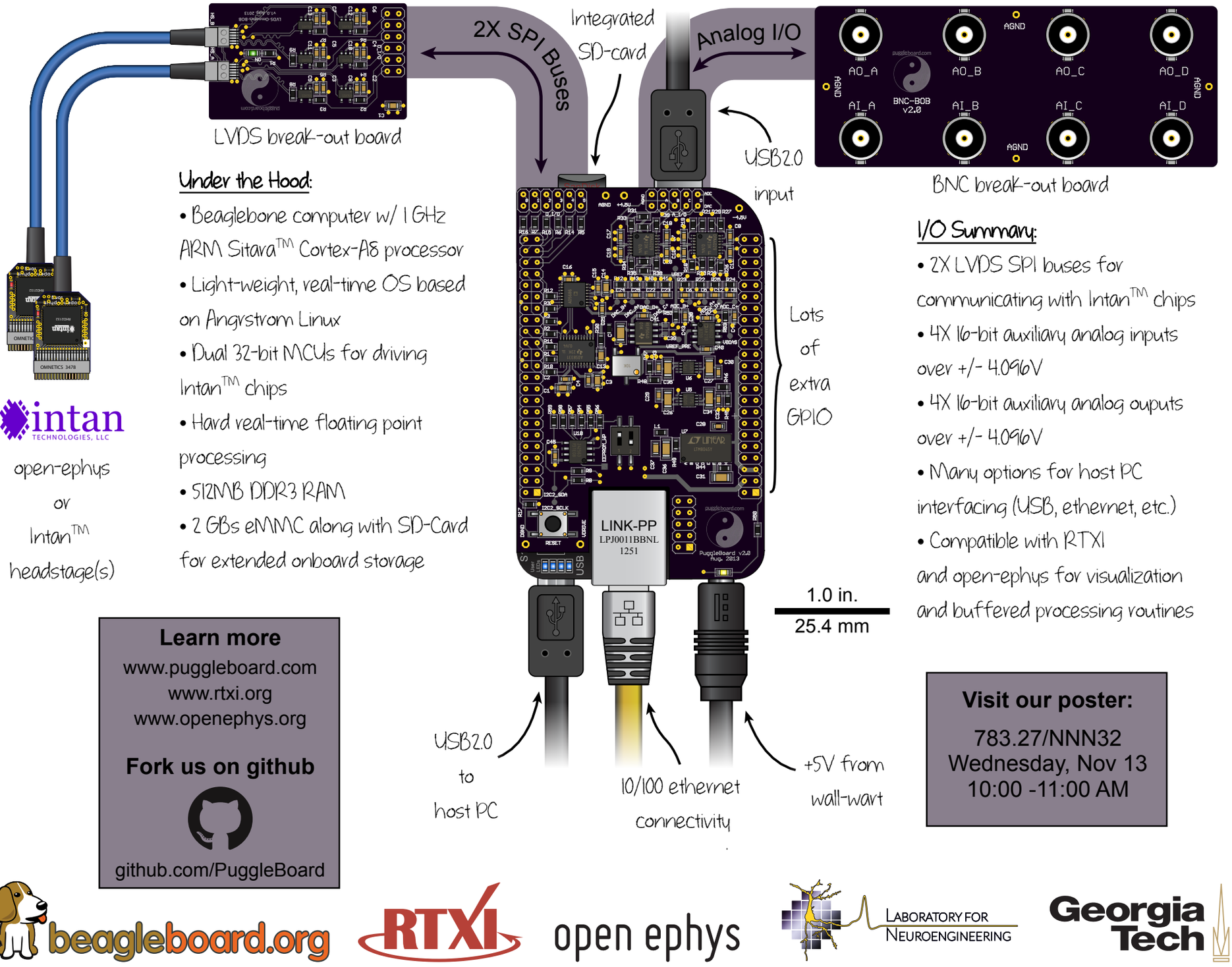
# puggle

www.puggleboard.com

- Low cost, ARM-based data acquisition and processing tool.
- Sense, process, and react to input signals in hard real-time.
- Built on the popular BeagleBone $45 embedded Linux computer

**$150*** *Approximate materials cost. Does not include Intan™ chips, cables, or headstage PCBs.

Acquisition to output in ~50 µs




## Under the Hood:

- Beaglebone computer w/ 1 GHz ARM Sitara™ Cortex-A8 processor
- Light-weight, real-time OS based on Angrstrom Linux
- Dual 32-bit MCUs for driving Intan™ chips
- Hard real-time floating point processing
- 512MB DDR3 RAM
- 2 GBs eMMC along with SD-Card for extended onboard storage

## I/O Summary:

- 2X LVDS SPI buses for communicating with Intan™ chips
- 4X 16-bit auxiliary analog inputs over +/- 4.096V
- 4X 16-bit auxiliary analog ouputs over +/- 4.096V
- Many options for host PC interfacing (USB, ethernet, etc.)
- Compatible with RTXI and open-ephys for visualization and buffered processing routines

intan TECHNOLOGIES, LLC

open-ephys or Intan™ headstage(s)

**Learn more**

www.puggleboard.com
www.rtxi.org
www.openephys.org

**Fork us on github**

github.com/PuggleBoard

**Visit our poster:**

783.27/NNN32
Wednesday, Nov 13
10:00 -11:00 AM

beagleboard.org RTXI open ephys Laboratory for Neuroengineering Georgia Tech