Tiles Version 2 –

Revision notes:

All TILEs:

The text labels help a lot – mirror text so that we can read the text top and bottom of each tile.

**Processing Tile:**

OK – no changes needed

**Arduino Tile:**

Basic shape:

Match side of Processing tile – no need for them to be different sizes any longer.

Bring back the ‘notch’ on one side of the Arduino – the one that matched the shape of a board.

Move the shield interface so that it is 90deg to where it is now.

So the edges will have:

Top 🡪 notch

Right 🡪 serial arrows

Bottom 🡪 shield interface

Left 🡪 TBA

Arduino Version 2:

To the above – we want to explore adding electrical in and out – this would allow attachment of things like sensors and actuators.

Can you see if there is another shape (arrows that don’t look like serial ???) Thay could be for interfacing electronics ?

Version 3 🡪

Lower priority – we would like to try a shield shape that has 13 legs not the 5 we have now – it will look like a comb. This should be done last.

Serial Library for Processing:

We need to add a small notch (trangle or other) to the serial side (theside with arrows) of the Processing serial library tile -- Think of it as an inny-belly button.

**xBee tiles**

We need several xBee tiles to match all their contexts.

We want xBee communication shape to be a circle on a stick. This is similar to old USB shape. It should match scale of the new serial arrowhead on a stick (where the arrow head is round).

Need 3 versions:

These can ALL stay the width of the xBee tile we have now.

Version 1: explorer (those little red boards):

Interface with Processing serial tile on one side – ADD a matching outty belly button (see serial above) -- these belly buttons should between the serial arrows – only one bellybutton per tile.

Version 2: basic breakout board (green breakout for arduino);

This is going to interface arduino serial one side and xBee other side.

NO BELLY BUTTON

Version 3: xBee shield. This shield should interface the shiled shape we have now (5 teeth) but it should wrap around the NEW arduino tile such that it blocks the serial arrows – the shield should have xBEE outputs and should have a second shiledshape so that we can stack shileds (sketch attached).

Internet TILES:

These are new (ish) replace OSC and TCP/IP.

The basic shape should be box on a stick (so replace serial arrow head with a small box)

Processing internet:

We need a PROCESSING LIBRARY version – it will be just like serial but boxes not arrows and NO belly button.

Arduino internet:

We need 2 arduino shield tiles for internet – these have same IO as each other and likely will only be different in terms of color. One of these represents wifi the other Ethernet.

These shieled should have a shape that is stackable – internet outputs – not sure what these look like yet.

OSC:

We are striving for a set of OSC libraries for all transport.

So we would like to try an OSC tile that is a hexagon. Each pair of opposite faces have a different mode of transport: serial, internet, xBee. The size of the faces should be just big enough to fit the communication shape. – not much bigger – its overall size will differ from the others.

There will be some variations on this too – but this is a good start.