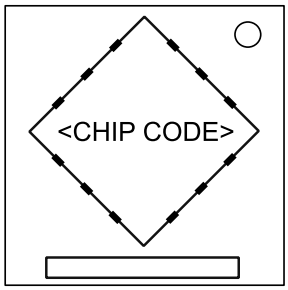
On the Subject of Tangrams



"A brand new concept for integrated circuit mass production, the ITC: Integrated Tangram Circuit[Patent Pending]."

Modules of this type will have a square integrated circuit chip, with exposed contact points around the edges. Internally, the integrated circuits are built up using modular pieces as detailed in the enclosed "TAN-M Poly Modular Chipset" blueprint upon a template as detailed in the enclosed "TAN-S" & "TAN-D" blueprint pages.

Defusing the module

To defuse the module, successfully overload the integrated circuit 3 times to pop and burn it out. To do this, identify pairs of contact points which will allow electrical current to flow uninterrupted from positive contact points to negative contact points.

Always select a positive contact point first, then a negative contact point, and then wait for the module to overload that electrical circuit; you will hear a small pop when a circuit has been successfully overloaded with current.

You must use different positive contact points for each pair of valid contact points (negative contact points can be reused though); selecting a pair with a previously used valid positive contact point will cause a strike. Selecting a pair of contact points that do not allow current to flow uninterrupted from positive to negative will cause a strike. Selecting any contact point while the module is busy overloading the circuit will cause a strike.

In order to determine which pairs of contact points are valid, you will need to reconstruct the internal circuit diagram for the installed integrated chip.

Constructing the circuit

The installed integrated chip will have a short string code (indicating either a "TAN-S" or "TAN-D" template structure), and then a sequence of digits — the number of digits in the chip code indicates the number of pieces required to fill a completed circuit template.

There will only be one template in the blueprints that will accept exactly the determined number of pieces with the asssociated template structure type - no cell in the template will ever be left unoccupied.

For each numbered cell, use its corresponding digit in the chip code to obtain the piece number that should be used to fill in that cell. For example, for a code of TAN-D 376581, that refers to template TAN-D-6471 (TAN-D, 6 pieces); cell #1 would use MT-03 (shape is medium triangle, 1st digit of code is 3), cell #2 would use ST-07 (shape is small triangle, 2nd digit of code is 7), etc.

For any piece where multiple orientations might be possible, match the white dot on the piece to the template to orient the piece correctly; pieces will never need to be flipped to fit into the templates.

Once you have constructed the circuit, you then need to read the constructed circuit diagram to find suitable pairs of contact points.

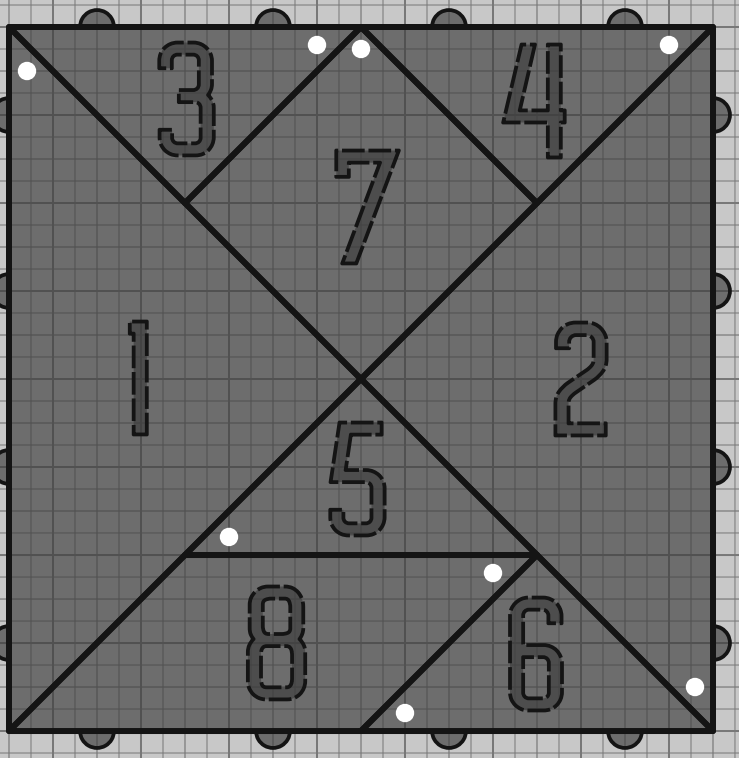
Reading the circuit diagram

Each individual piece contains contact points, which will connect up to adjacent pieces to allow the circuit to flow correctly from piece to piece. Some contact points are not connected to any circuitry, and as such should be treated as a 'dead-end' for electrical current.

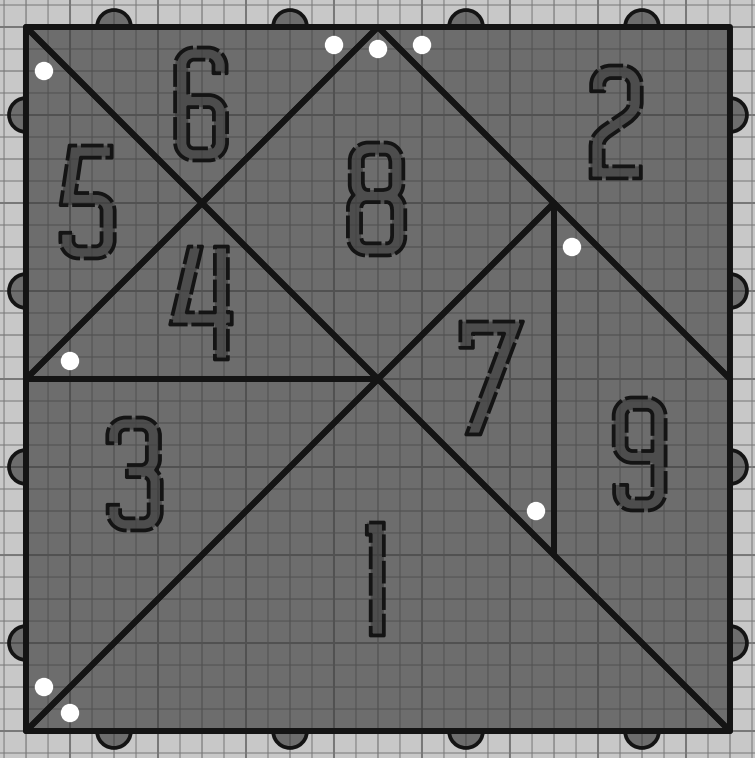
Intersecting lines are only connected if there is a connector dot at the intersection point; if there is not a connector dot, then the lines 'jump' over each other instead.

Electrical current is directional, and will only flow from positive to negative. Diodes in the circuits will only allow current to flow in one direction (the direction the diode is pointing to, towards the perpendicular line); current will not be able to flow in the opposite direction through the diode.

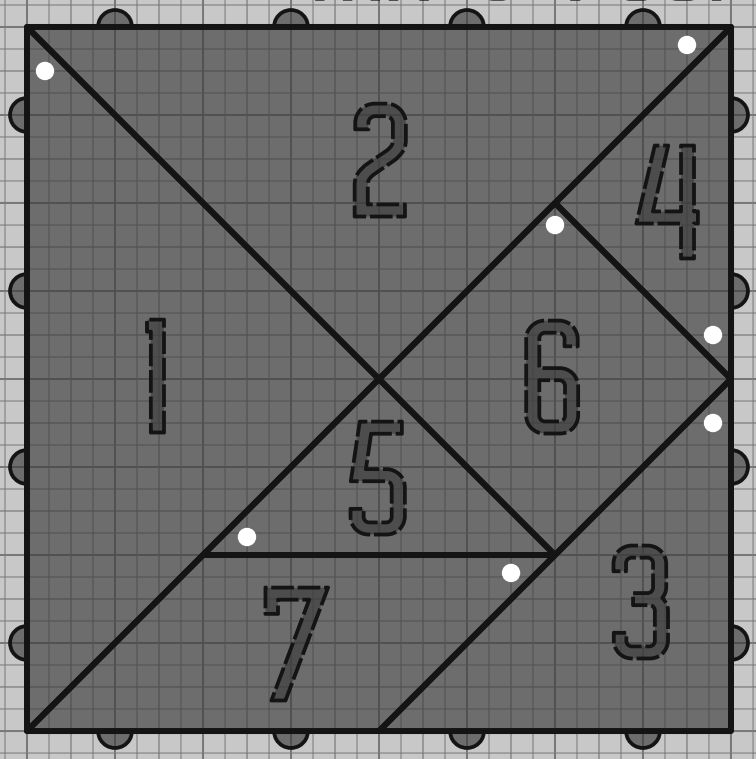
TAN-S-8274



TAN-S-9160

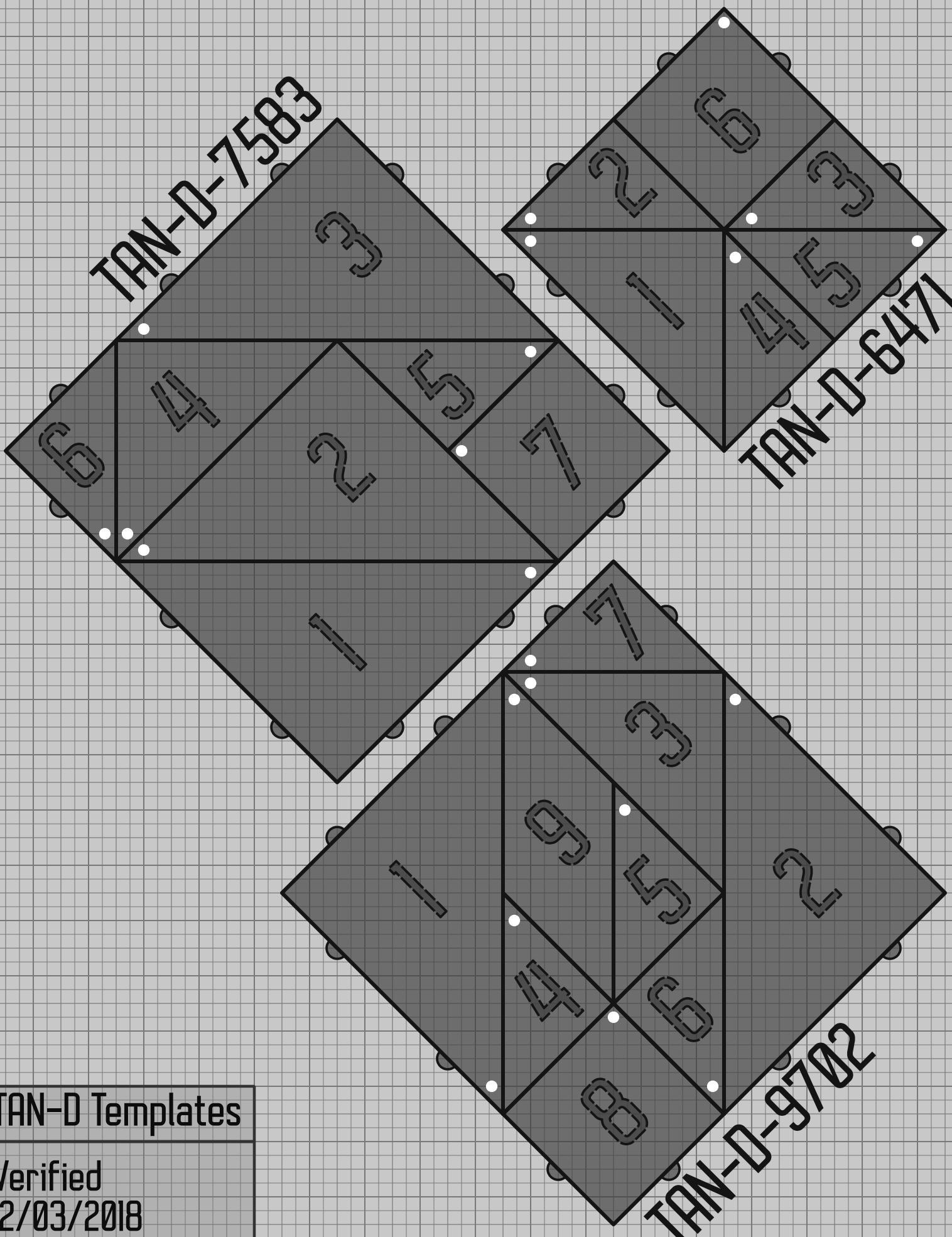


TAN-S-7331



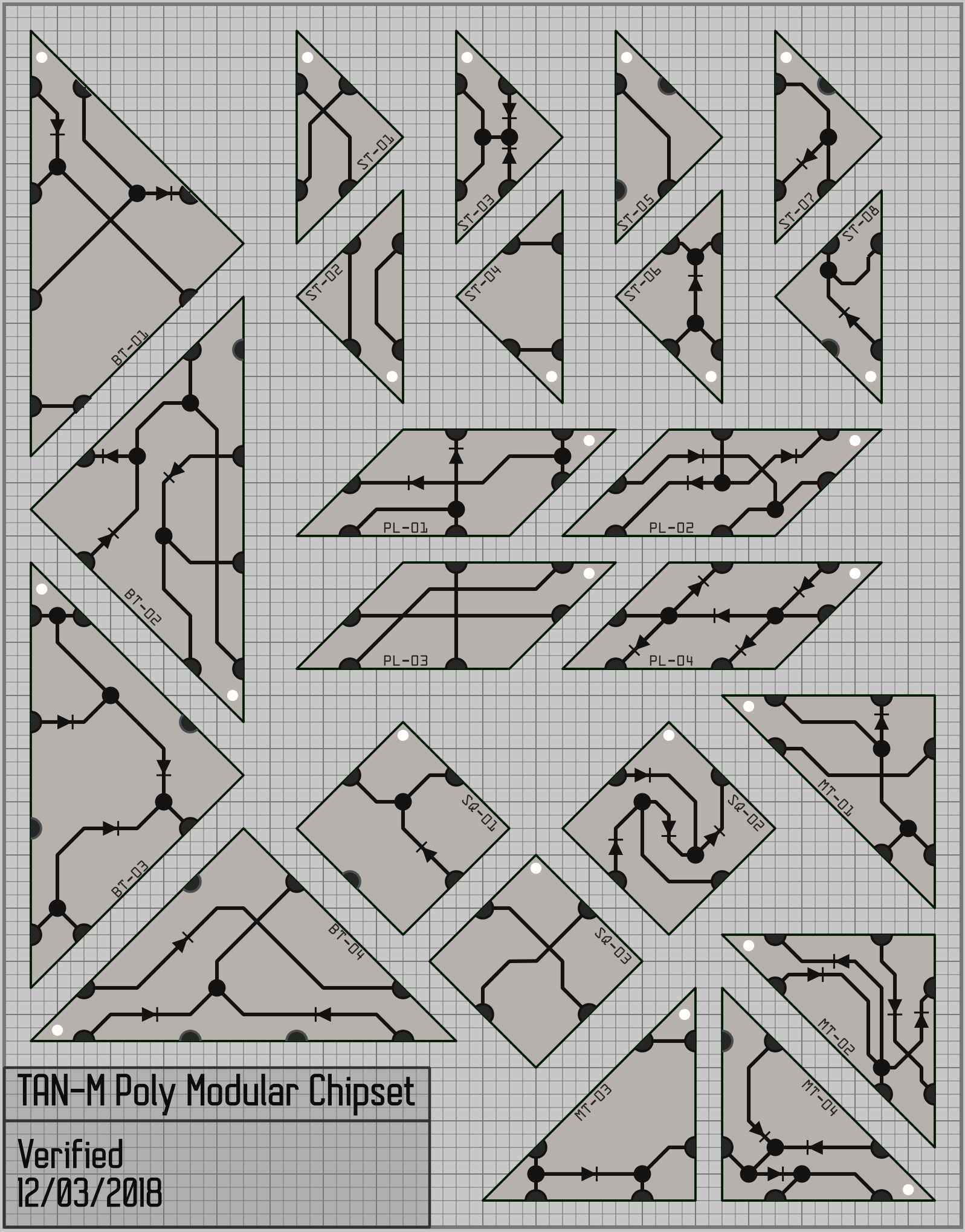
TAN-S Templates

Verified
12/03/2018



TAN-D Templates

Verified
12/03/2018



TAN-M Poly Modular Chipset

Verified
12/03/2018