Klondike 16 / 64 Modular Design

Klondike is designed to fit together in an unlimited tile arrangement. The pin headers located on the K16 board allow using a simple jumper blocks to join units and enable board to board communication without having to deal with cables and wiring hassles. One single mini-USB connector is all that is needed to control the array. Special repeater-jumpers can boost the I2C signal and allow more boards to be attached.

The diagram below shows how K16 units connect, and the flow of control communication via I2C pathways. The large red squares show how a K64 board is really just 4 x K16 already pre-connected on one board. Like a K16 the K64 is designed to also tile, with both other K64 and smaller K16 units.