I2c address for led controller:

**0x1a**

Max message size in bytes for led controller:

**193**

**I2c messages:**

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| **Byte command** | **meaning** |
| 0x01 | Update all leds.  The remaining message is the individual GRB values for every led in the array, for example, the i2c byte stream  0x01 0xff 0x00 0xff 0x00 0xff 0x10  will set two leds, first one to G = 255, R = 0, B = 255. Second one to G = 0, R = 255, B = 16 |
| 0x02 | Update specific led(s)  Byte 0: the command value (0x02)  Byte 1: the number of leds to change (up to 255)  Byte 2: led to change  Byte 3,4,5: GRB value to switch to  Byte 6: GOTO byte 2  For example:  0x02 0x02 0x0A 0x80 0x80 0x00 0x11 0xFF 0xFF 0xFF  Will set the 10th led to orange (G=128,R=128,B=0) and the 17th led to white.  Max message size for led controller is 193 bytes, so there is a limit to how many leds can be updated with this command. The limit is (MAX\_MESSAGE\_SIZE - 2 control bytes) / 4 bytes per led = 47 leds can be updated with this command, or 2/3 of the board, given 64 leds (4 leds per tile with 16 tiles) |
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