Grove Analog
An Orove nailog connector consists of the standard four lines coming into the Grove plug,
An Orove nailog connector consists of the standard four lines coming into the Grove plug,
Most nodules only use A0.
Often base units will have the first connector called A0 and the second called A1 and they will be wired A0/A1 and then A1/A2, etc. Orove Digital
A digital Grove connector consists of the standard four lines coming into the Grove plug.
The two signal lines are generically called D0 and D1.
Most nodules only use D0. but some do (like the LED Bar Grove display) use both.
Often base units will have the first connector called D0 and the second called D1 and they will be wired D0/D1 and then D1/D2. etc. + V + 5 V + VDDIO C7 + Ј1а +vDDIO J1b J2a J2b 25PK100MEFC5X11 100u RPEF11H104Z2P1A01B VDD IO 32 I 2 C - 1 I 2 C - 2 I 2 C - 3 I 2 C - 4 GND 1.7 GND 1.7 3.2 2 3 Ana1 3 33 1.6
1.5
1.4
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1.2
1.1
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12.0 SCL
12.1 SDA
12.2
12.3
12.4
12.5
12.6 RX
12.7 TX
2.7
2.6
2.5
2.4
2.3
2.2 SW
2.1 LED 4 5 Ana2 3. 2 3. 3 3. 4 3. 5 3. 6 3. 7 15. 0 15. 1 15. 2 15. 3 15. 4 15. 5 0. 0 0. 1 0. 2 0. 3 35 35 36 37 35 1.4 6 36 6 7 36
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OND
Vss 8 3.8 I2CSDA 8 11 12CSCL
12 12CSDA
13 UARTIRND
14 UARTITND
15 UART2TND
16 UART2TND
17 4
18 4
19 45
20 50
21 D5 51
22 D4 52
23 D3 53
24 54
25 55
26 55
27 7 8 39 1.1 10 12.0 SCL 11 UART-1 UART-2 12.1 SDA 12.2 12 13 12.3 1 4 15 12.5 12.5 12.6 RX 12.7 TX 2.7 2.6 2.5 2.4 2.3 16 17 UART1R×D UART1T×D 18 UART2R×D UART2T×D 20 21 0.5 0.6 0.7 23 24 D2 2.2 SW 2.1 LED RESET GND VDD VDD USER1 USER1 25 2.0 2.0 26 27 USER2 USER2 28 29 30 USER3 USER2 USER3 Ana2 Digital-1 Digital-2 Digital-3 25PK100MEFC5X11 P1a P1b RPEF11H104Z2P1A01B VDD IO VDD IO VDD IO OND 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 12.0 SCL 12.1 SDA 12.2 1 2 3 4 4 5 GND 1.7 1.6 1.5 1.4 6 7 6 7 8 9 10 11 12 12 13 14 15 16 17 18 19 D3 1.3 1.1 12.0 SCL I 2 CSCL 1.1 12.1 SDA 12.2 P2a P2b UART1R×D 13 12. 2 12. 3 12. 4 12. 5 12. 6 RX 12. 7 TX 2. 7 2. 6 2. 5 2. 4 2. 3 2. 2 SW 2. 1 LED 2. 0 UART1TxD 14 UART2RxD 15 12.3 UART2TxD 16 12.5 3.1 12.5 12.6 RX 12.7 TX 2.7 2.6 2.5 2.4 2.3 3. 2 3. 3 3. 4 3. 5 3. 6 3. 7 0. 6 0. 7 USER1 GND VDD 18 Ana2 3.3 3.4 3.5 3.6 3.7 0.6 0.7 USER1 GND VDD 19 Ana3 20 21 21 22 23 23 D1 24 25 2. 2 SW 2. 1 LED D2 10 11 25 SP1 U3 LM60BIZ N R1 + V + 5 V Vou t GND 25PK100MEFC5X11 100u R2 1 k + C11 25PK100MEFC5X11 ____C10 3 1 4 2 RPEF11H104Z2P1A01B RPEF11H104Z2P1A01B SW2 3 1 4 2 P102 +VDDIO 1-2 SHORT +3.3V +VDDIO 2-3 SHORT +5V or +5VEXT J3 JP1 P101 SHORT +5VEXT -> +5V or USB VCC -> +5V OPEN 7805 -> +5V SW3 3 1 4 2 +VDDIO 6

× 7

× 8

× 9

× 10

1 1

1 2

1 3 +5 V DT1 DT0 DT3 DT2 DT5 DT4 +V | |-5VEXT 3 1 4 2 VIn Vout GND VIn Vout GND C 1 LEFT SW5 3 1 4 2 GND 25PK100MEFC5X11 0ND +VDDIO 25PK100MEFC5X11 100u 25PK100MEFC5X11 RIGH A DIK D3 SW6 3 1 4 2 A DIK D4 A DIK D5 A DE N GND A D'K D7 Vss A DE DE

Grove I2C Those long term readers of this blog know that our favourite devices are I2C sensors. Those iong term readers of I2C Grove sensors available. Most are 5V/3.3V devices, but there are a few that are only 3.3V or 5.0V. You need to check the specifications.

Grove UART
The Grove UART module is a specialized version of a Grove Digital Module.
It uses both Pin 1 and Pin 2 for the serial input and transmit.
The Grove UART plug is labeled from the base unit point of view.
In other words. Pin 1 is the RX line (which the base unit uses to receive data, so it is an input)
where Pin 2 is the TX line (which the base unit uses to transmit data to the Grove module).