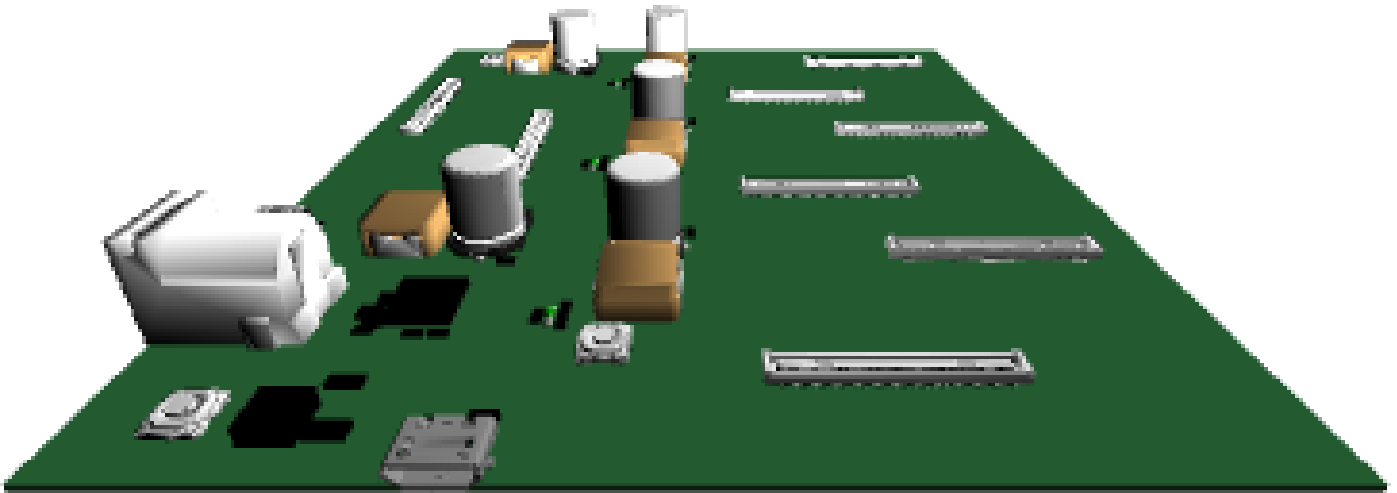


Intel Joule Module MultiFlasher



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Board Description

Intel Joule Module Multi-Flasher Board

Board Dimensions

10.0cm x 10.8cm

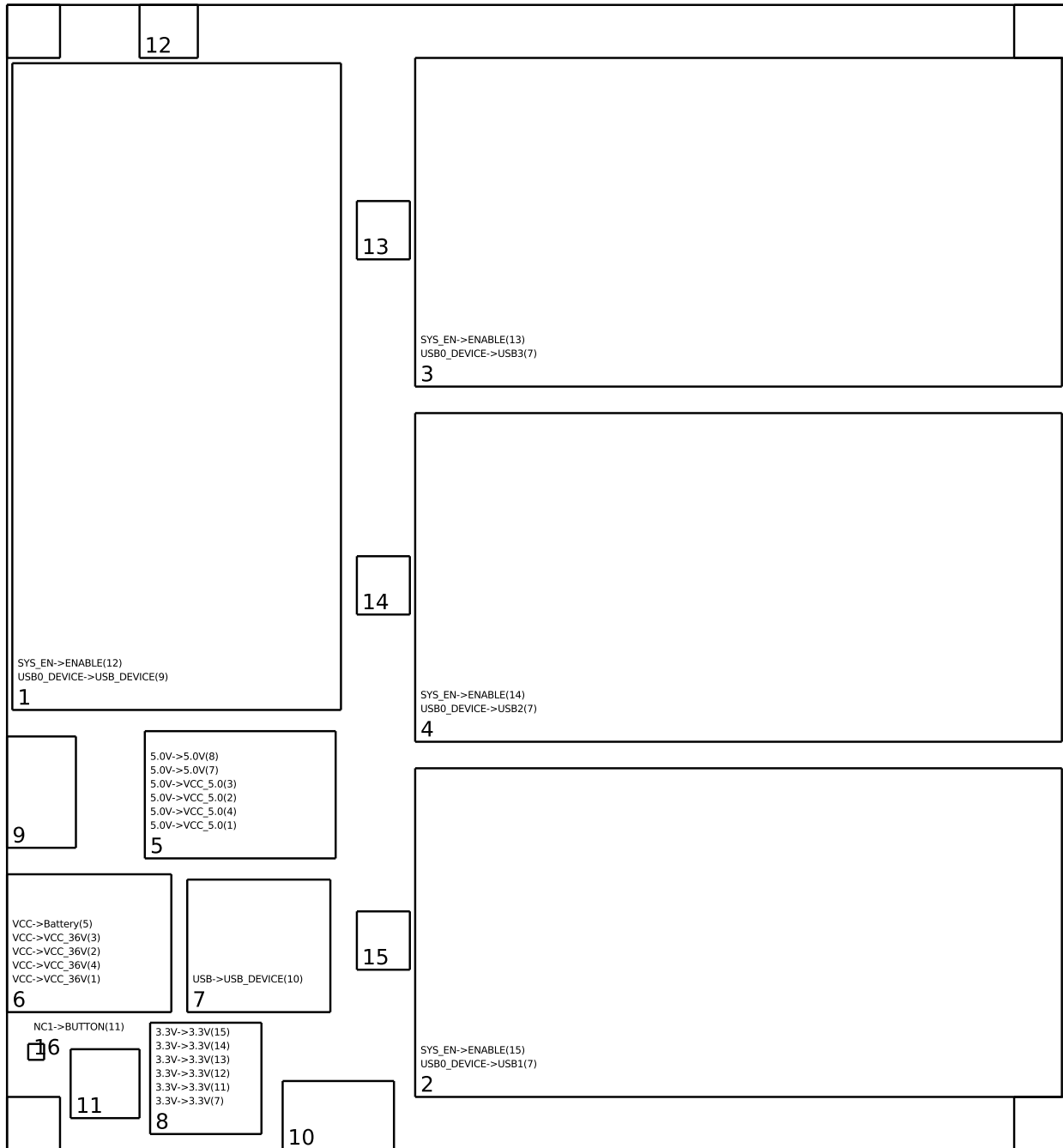


Contents

1	Modules on Board	1
1.1	COM Connectors	1
1.1.1	Intel Joule Module Connector (v7) (1)	1
1.1.2	Intel Joule Module Connector (v7) (2)	2
1.1.3	Intel Joule Module Connector (v7) (3)	2
1.1.4	Intel Joule Module Connector (v7) (4)	2
1.2	Power	3
1.2.1	5V/5A Regulator (v3) (5)	3
1.2.2	3.3V/1.5A Regulator (v9) (8)	3
1.3	Power Connectors	3
1.3.1	Barrel Connector (20V 3A) (v2) (6)	3
1.4	USB	4
1.4.1	3-Port USB Client Hub (v1) (7)	4
1.4.2	Micro-B Jack (v8) (9)	4
1.4.3	Micro-B Jack (v8) (10)	4
1.5	IO	4
1.5.1	Tactile Switch (v9) (11)	4
1.5.2	Green LED (v13) (12)	4
1.5.3	Green LED (v13) (13)	4
1.5.4	Green LED (v13) (14)	4
1.5.5	Green LED (v13) (15)	5
1.6	Mechanical	5
1.6.1	Mounting Hole (2.2mm)	5
1.6.2	Mounting Hole (2.2mm)	5
1.6.3	Mounting Hole (2.2mm)	5
1.6.4	Mounting Hole (2.2mm)	5
1.7	Headers	5
2	Module Connections Graph	6
3	Module Power Graph	7



1 Modules on Board



1.1 COM Connectors

1.1.1 Intel Joule Module Connector (v7) (1)

- VCC_5.0 from 5V/5A Regulator (5)



- VCC_36V from Barrel Connector (20V 3A) (6)

The Tesla connectors provide the following outputs:

- USB0_DEVICE to Micro-B Jack (9)
- SYS_EN to Green LED (12)

1.1.2 Intel Joule Module Connector (v7) (2)

- VCC_5.0 from 5V/5A Regulator (5)
- VCC_36V from Barrel Connector (20V 3A) (6)

The Tesla connectors provide the following outputs:

- USB0_DEVICE to 3-Port USB Client Hub (7)
- SYS_EN to Green LED (15)

1.1.3 Intel Joule Module Connector (v7) (3)

- VCC_5.0 from 5V/5A Regulator (5)
- VCC_36V from Barrel Connector (20V 3A) (6)

The Tesla connectors provide the following outputs:

- USB0_DEVICE to 3-Port USB Client Hub (7)
- SYS_EN to Green LED (13)

1.1.4 Intel Joule Module Connector (v7) (4)

- VCC_5.0 from 5V/5A Regulator (5)
- VCC_36V from Barrel Connector (20V 3A) (6)

The Tesla connectors provide the following outputs:

- USB0_DEVICE to 3-Port USB Client Hub (7)
- SYS_EN to Green LED (14)



1.2 Power

1.2.1 5V/5A Regulator (v3) (5)

Takes 6 - 36V input from Barrel Connector (20V 3A) (6) and provides up to 5A at 5V to:

- Intel Joule Module Connector (1)
- Intel Joule Module Connector (4)
- Intel Joule Module Connector (2)
- Intel Joule Module Connector (3)
- 3-Port USB Client Hub (7)
- 3.3V/1.5A Regulator (8)

1.2.2 3.3V/1.5A Regulator (v9) (8)

This DC to DC step down regulator provides a 3.3V DC output at 1.5A needed by certain components on this board. It is capable of accepting an input voltage between 3.1 to 16V DC. Currently, its input is 5V from 5V/5A Regulator (5).

This regulator provides 3.3V to:

- 3-Port USB Client Hub (7)
- Tactile Switch (11)
- Green LED (12)
- Green LED (13)
- Green LED (14)
- Green LED (15)

1.3 Power Connectors

1.3.1 Barrel Connector (20V 3A) (v2) (6)

This power jack is compatible with Gumstix 20V/3A DC power adapter using a barrel connector.

This power jack provides 20V to the following modules:

- Intel Joule Module Connector (1)
- Intel Joule Module Connector (4)
- Intel Joule Module Connector (2)
- Intel Joule Module Connector (3)
- 5V/5A Regulator (5)



1.4 USB

1.4.1 3-Port USB Client Hub (v1) (7)

This USB hub offers three interfaces for USB ports from Micro-B Jack (10).

This hub is connected to the following USB ports:

- USB1 is connected to USB0_DEVICE on Intel Joule Module Connector (2)
- USB2 is connected to USB0_DEVICE on
- USB3 is connected to USB0_DEVICE on Intel Joule Module Connector (3)

1.4.2 Micro-B Jack (v8) (9)

A USB micro-B port allows your design to connect as a USB device to a USB host.

This module is connected to USB0_DEVICE on Intel Joule Module Connector (1).

1.4.3 Micro-B Jack (v8) (10)

A USB micro-B port allows your design to connect as a USB device to a USB host.

This module is connected to USB on 3-Port USB Client Hub (7).

1.5 IO

1.5.1 Tactile Switch (v9) (11)

This 4.9 sq. mm light touch switch provides a user input for the signal NC1 on NC (16).

1.5.2 Green LED (v13) (12)

This 1608 standard size green LED provides an indicator for the signal SYS.EN on Intel Joule Module Connector (1).

1.5.3 Green LED (v13) (13)

This 1608 standard size green LED provides an indicator for the signal SYS.EN on Intel Joule Module Connector (3).

1.5.4 Green LED (v13) (14)

This 1608 standard size green LED provides an indicator for the signal SYS.EN on Intel Joule Module Connector (4).



1.5.5 Green LED (v13) (15)

This 1608 standard size green LED provides an indicator for the signal SYS_EN on Intel Joule Module Connector (2).

1.6 Mechanical

1.6.1 Mounting Hole (2.2mm)

A #0 mounting hole for securing the board with mounting pins.

1.6.2 Mounting Hole (2.2mm)

A #0 mounting hole for securing the board with mounting pins.

1.6.3 Mounting Hole (2.2mm)

A #0 mounting hole for securing the board with mounting pins.

1.6.4 Mounting Hole (2.2mm)

A #0 mounting hole for securing the board with mounting pins.

1.7 Headers



2 Module Connections Graph

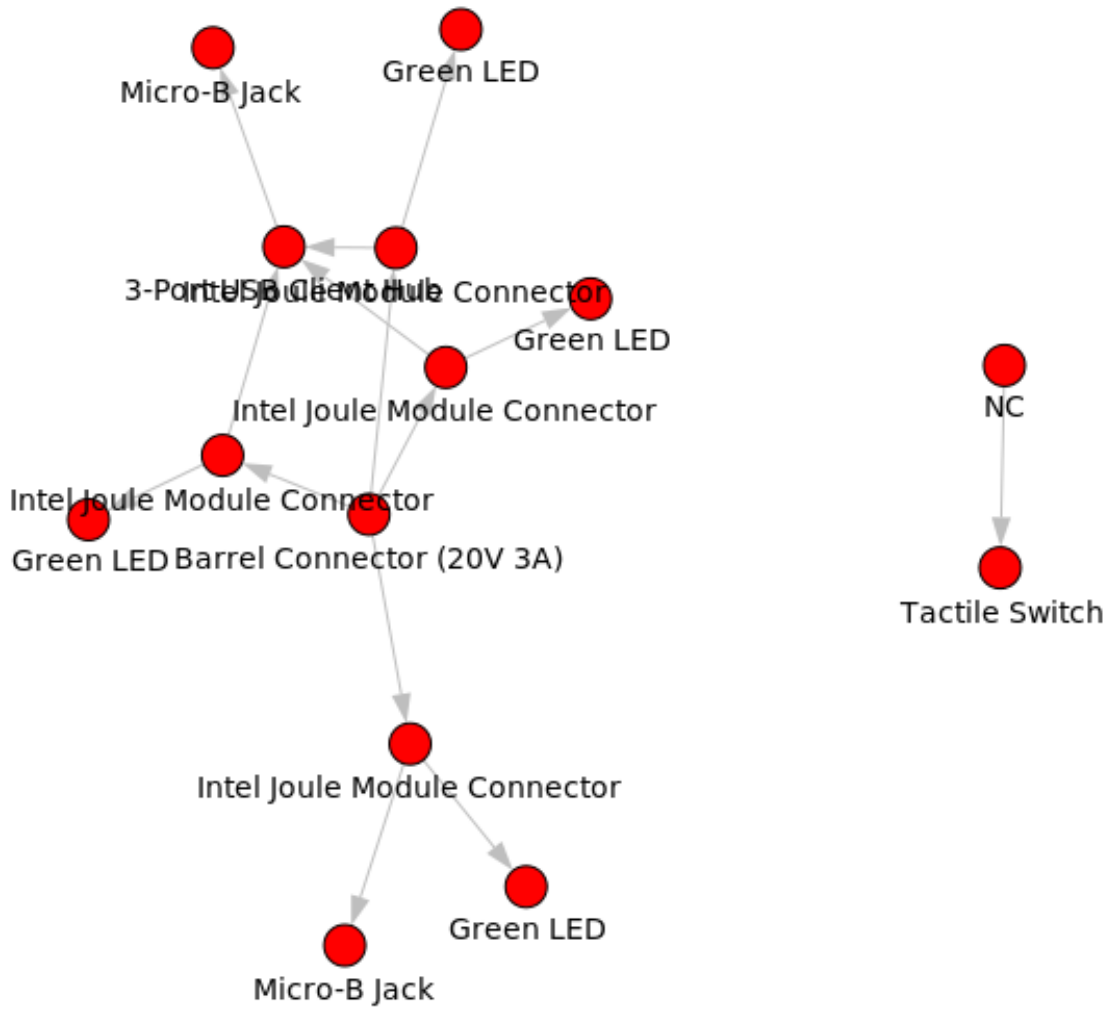


Figure 1: excludes power modules



3 Module Power Graph

