



Intelligent Systems

# Intel® Quark™ Platforms Best Known Configuration

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# Revision History

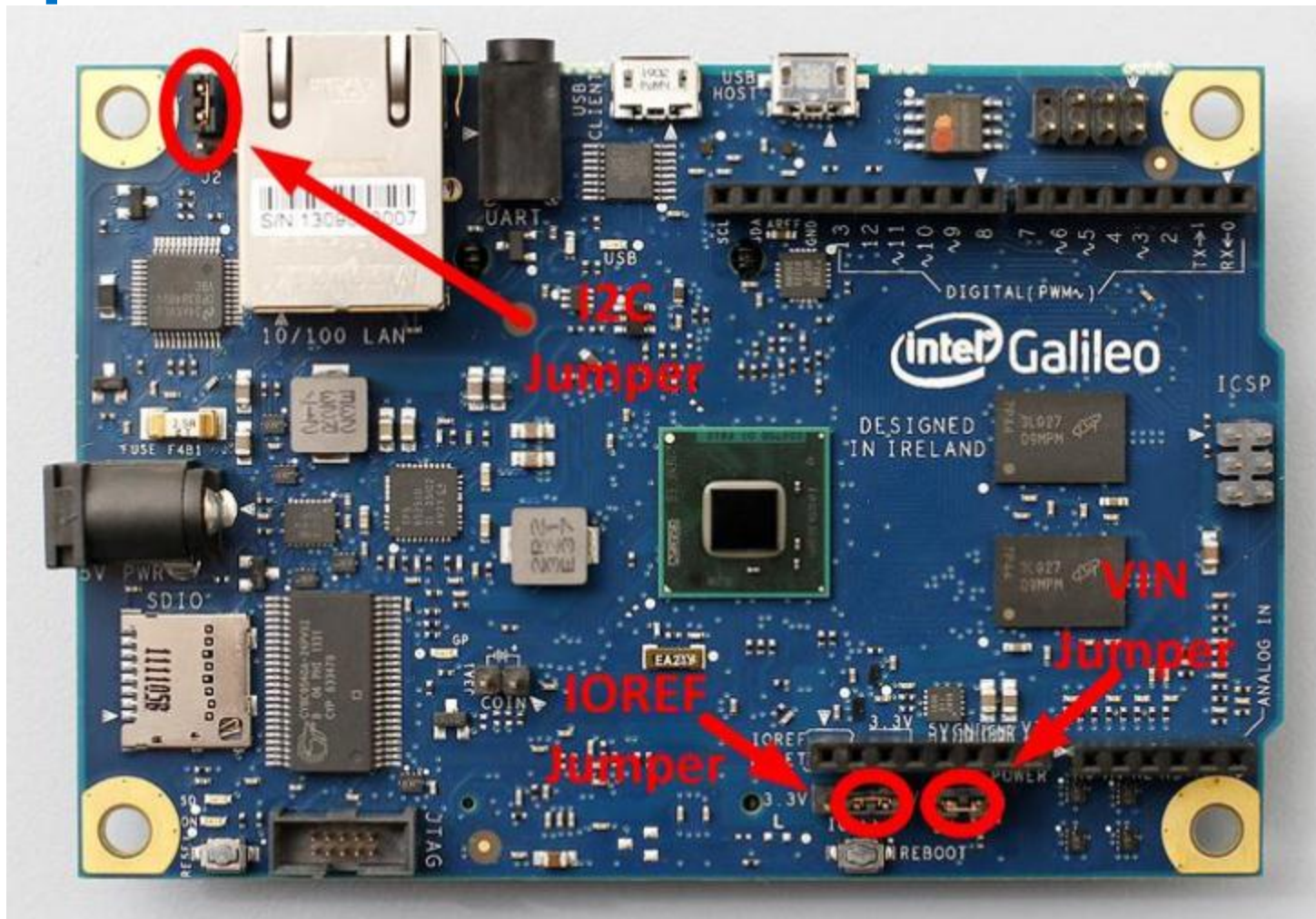
Revision No.	Description	Revision Date
0.5	Initial release.	August 2014

Hardware Category	Description	Rev/Type/Source
CRB	Galileo	Fab D
SoC	Intel® Quark™ X1000	-
Memory	8MB SPI Flash 512 KB embedded SRAM 256MB DRAM	-
Core Speed	400MHz	-

# Best Known Configuration – Jumper Settings

Jumper	Pin 1	Pin 2	Pin 3
I2C	Open	Connected	Connected
IOREF	Connected	Connected	Open
VIN	Connected	Connected	N/A

# Jumper Locations



# Jumper Details

## IOREF Jumper

To allow Galileo support both 3.3V and 5V shields, the external operating voltage is controlled via a jumper. When the jumper is connected to 5V, Galileo is configured to be compatible with 5V shields and IOREF is set to 5V. When the jumper is connected 3.3V, Galileo is configured to be compatible with 3.3V shields and IOREF is set to 3.3V.

The input range of the Analog pins is also controlled by the IOREF jumper and must not exceed the chosen operating voltage. However, the resolution of AnalogRead() remains at 5 V/1024 units for the default 10-bit resolution or, 0.0049V (4.9mV) per unit regardless of IOREF jumper setting.

Warning: The IOREF jumper should be used to match the board and shield operating voltages. Incorrectly setting the voltage could damage the board or the shield.

## I2C\* Address Jumper

To prevent a clash between the I2C\* Slave address of the on board I/O expander and EEPROM with any external I2C Slave devices, jumper J2 can be used to vary the I2C\* address of the on-board devices. With J2 connected to pin 1 (marked with white triangle), the 7-bit I/O Expander address is 0100001 and the 7-bit EEPROM address is 1010001. Changing the jumper position changes the I/O Expander address to 0100000 and the EEPROM address to 1010000

## VIN Jumper

On Galileo, the VIN pin can be used to supply 5V from the regulated power supply connected at the power jack to attached shields or devices. If there is a need to supply more than 5V to a shield using VIN then the VIN jumper should be removed from Galileo to break the connection between the on-board 5V supply and the VIN connection on the board header.

Warning: If the VIN jumper is not removed and more than 5V is connected to VIN, it may damage the board or lead to unreliable operation.



# Best Know Configuration – FW/SW Category

Firmware Category	Description	Rev/Type/Source
CRB BIOS	V 1.0.2	<a href="https://downloadcenter.intel.com/Detail_Description.aspx?DwnldID=23962">https://downloadcenter.intel.com/Detail_Description.aspx?DwnldID=23962</a>
Arduino IDE	Arduino SW 1.5.3	<a href="https://communities.intel.com/docs/DOC-22226">https://communities.intel.com/docs/DOC-22226</a>
Python	V 2.6 or 2.7	-
GCC and G++	Tested with GCC 4.3 and 4.7	-
Subversion Client	r13937	-



# Best Known Configuration – Driver/OS Category

Driver/OS Category	Description/Version	Rev/Type/Source
Operating System	Linux (Debian 7.0 Wheezy)	-

# BKC Package Requirements

The following are packages required to build the BSP software:

- build-essential
- gcc-multilib
- vim-common
- uuid-dev
- iasl
- subversion
- gnu-efi
- autoconf
- libtool
- git
- diffstat
- texinfo
- gawk
- chrpath
- file