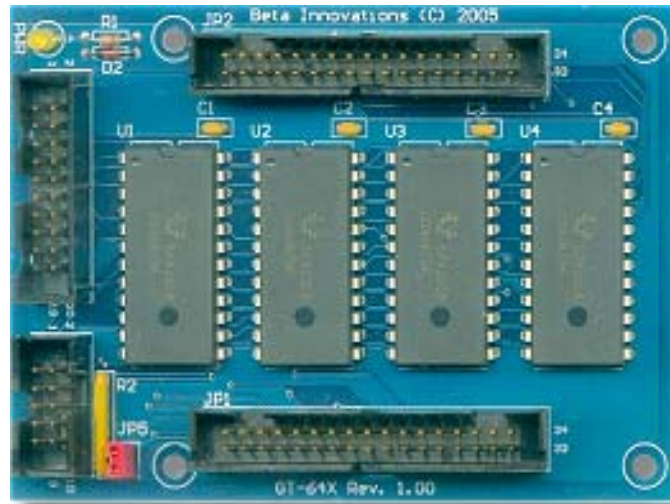


GT-64X Expansion Card



Product ID. : GT-64X
Rev. : 1.00
Date : July 18, 2006
Firmware Rev. : N/A

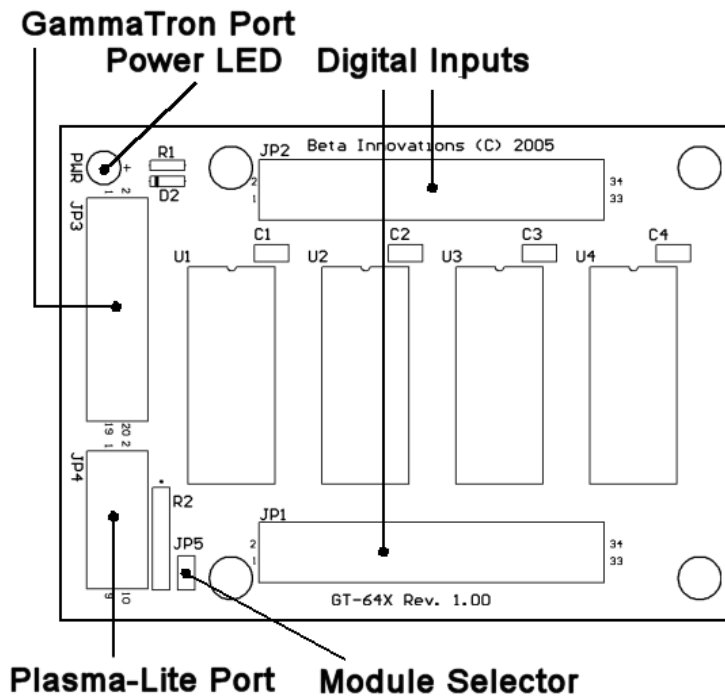
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Connecting the GT-64X Card

IMPORTANT: DO NOT PLUG the GT-64X module into any expansion port while the USB module is plugged into a USB port. Disconnect the module from the USB port before installing the GT-64X card.

With the module disconnected from the USB bus, connect the GT-64X card to the expansion port using the keyed ribbon cable supplied with your card. If using your own cable, care must be taken to ensure that the orientations of pin 1 on the cable connectors are matched to pin 1 of the USB module and GT-64X expansion sockets.



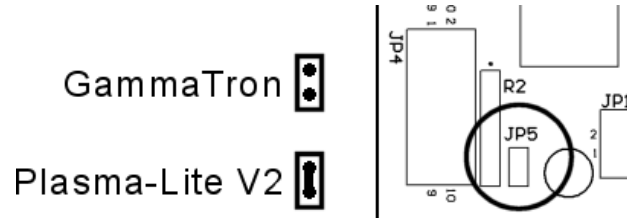
The GT-64X card is a passive device and will not be automatically detected by your USB module. You will need to activate the expansion port of your module in order to use the GT-64X inputs.

See the Device Manager utility help file for details on activating expansion port features on your USB module.

Module Selector : JP5

The GT-64X™ expansion card is compatible with the GammaTron and Plasma-Lite V2 USB Modules. Jumper JP5 is used to select which module the expansion card is to be connected to.

Module Selector Jumper JP5



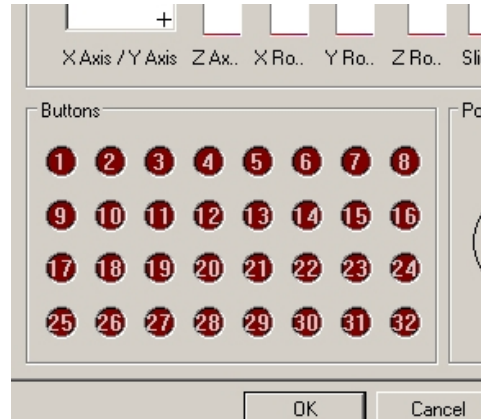
Module Selector jumper JP5 should remain open (disable) when connected to the GammaTron and closed (enabled) when connected to the Plasma-Lite. See the Device Manager utility user manual for details on configuring the USB module expansion port for use with the GT-64X card.

GT-64X Pin-Out

The GT-64X expansion card adds an additional 64 button inputs and requires no configuration. These additional button inputs will appear following the standard compliment of button inputs on the GammaTron and Plasma-Lite modules.

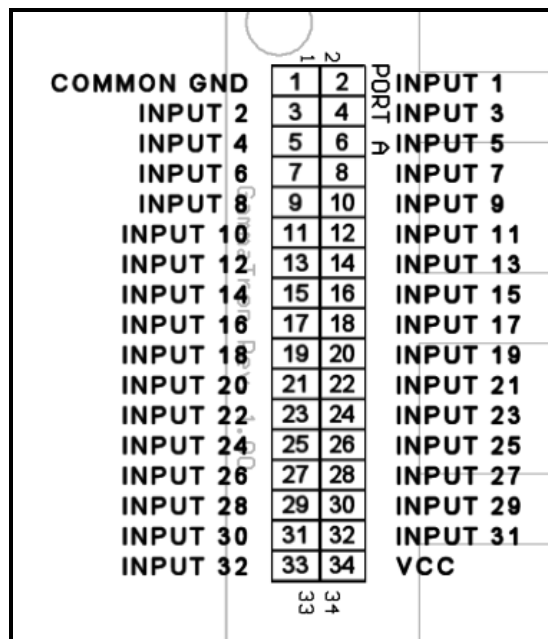
Plasma-Lite's standard buttons consist of 1 through 24. GT-64X inputs will register as buttons 25 through 88.

NOTE: Button inputs 33 through 88 will not be visible in the Windows Games Controller applet. These additional buttons are only available to applications that support DirectX Direct Input. If your application does not support these additional inputs, you can assign keyboard key macros by using *Keyboard Studio* for a complete keyboard emulation solution.



GammaTron's standard inputs consist of 1 through 64. GT-64X inputs will register as buttons 65 through 128.

JP1 (Port A) Pin-Out



JP2 (Port B) Pin-Out

COMMON GND	1	2	INPUT 33
INPUT 34	3	4	INPUT 35
INPUT 36	5	6	INPUT 37
INPUT 38	7	8	INPUT 39
INPUT 40	9	10	INPUT 41
INPUT 42	11	12	INPUT 43
INPUT 44	13	14	INPUT 45
INPUT 46	15	16	INPUT 47
INPUT 48	17	18	INPUT 49
INPUT 50	19	20	INPUT 51
INPUT 52	21	22	INPUT 53
INPUT 54	23	24	INPUT 55
INPUT 56	25	26	INPUT 57
INPUT 58	27	28	INPUT 59
INPUT 60	29	30	INPUT 61
INPUT 62	31	32	INPUT 63
INPUT 64	33	34	VCC

NOTE: VCC is only available when connected to the GammaTron. VCC is to be treated as NC (No Contact) when connected to the Plasma-Lite.

Hardware Specifications

All inputs on the GT-64X are active low, which means you must ground an input in order to register a high "ON" signal at the output.

Maximum power consumption is 30mW (6mA) and is powered by the Plasma expansion port. You do not need to use an external power supply for this device.

NOTE: DO NOT CONNECT any of the GT-64X pins to external power supplies or voltage sources. Although common grounds can be safely connected to external grounds, it is not recommended and should be avoided whenever possible. Doing so may adversely affect performance, possibly causing strange or erratic behavior under certain conditions.

Visit www.betainnovations.com for the availability of expansion modules and accessories.