GPIO-HSTC Card

J2
GPIO-HSTC Conn_02x20_Odd_Even

LED1
INTA
MISO
MOSI
SCK
CS
GND
+3.3V

GND

SPI EXPANDER

+3.3V

U1
MCP23S17_SP

| 9 | VDD |

11	CS	GPB0	1
12	SCK	GPB1	2
13	SI	GPB2	3
14	SO	GPB3	4
		GPB4	5
		GPB5	6
19	INTB	GPB6	7
20	INTA	GPB7	8

CS
SCK
MOSI
MISO

+3.3V
INTA

| 18 | RESET |

R2 10k

	GPA0	21	GPA0
	GPA1	22	GPA1
	GPA2	23	GPA2
	GPA3	24	GPA3
17	A2	GPA4	25
16	A1	GPA5	26
15	A0	GPA6	27
	VSS	GPA7	28

| 10 | VSS |

GND

R3 10k R4 10k R5 10k R6 10k

GND GND GND GND

PULLDOWN RESISTORS
VALUE TO BE CHECKED

JOYSTICK DB15 example
(TO BE REMOVED)

GPA1
GPA3

GND

GPA2
GPA0

+3.3V

J1
DB15_Male

8
15
7
14
6
13
5
12
4
11
3
10
2
9
1

Pin 2 – button A
Pin 7 – button B
Pin 10 – button C
Pin 14 – button D

Core Led

D1
LED

LED1

R1
220

GND

IMPROVEMENTS:

−Remove HSTC connector and add a LTC type 14 pin connector
− Add 0.1" female headers for SPI/I2C
−Jumper to disable SPI chip

DRAFT VERSION