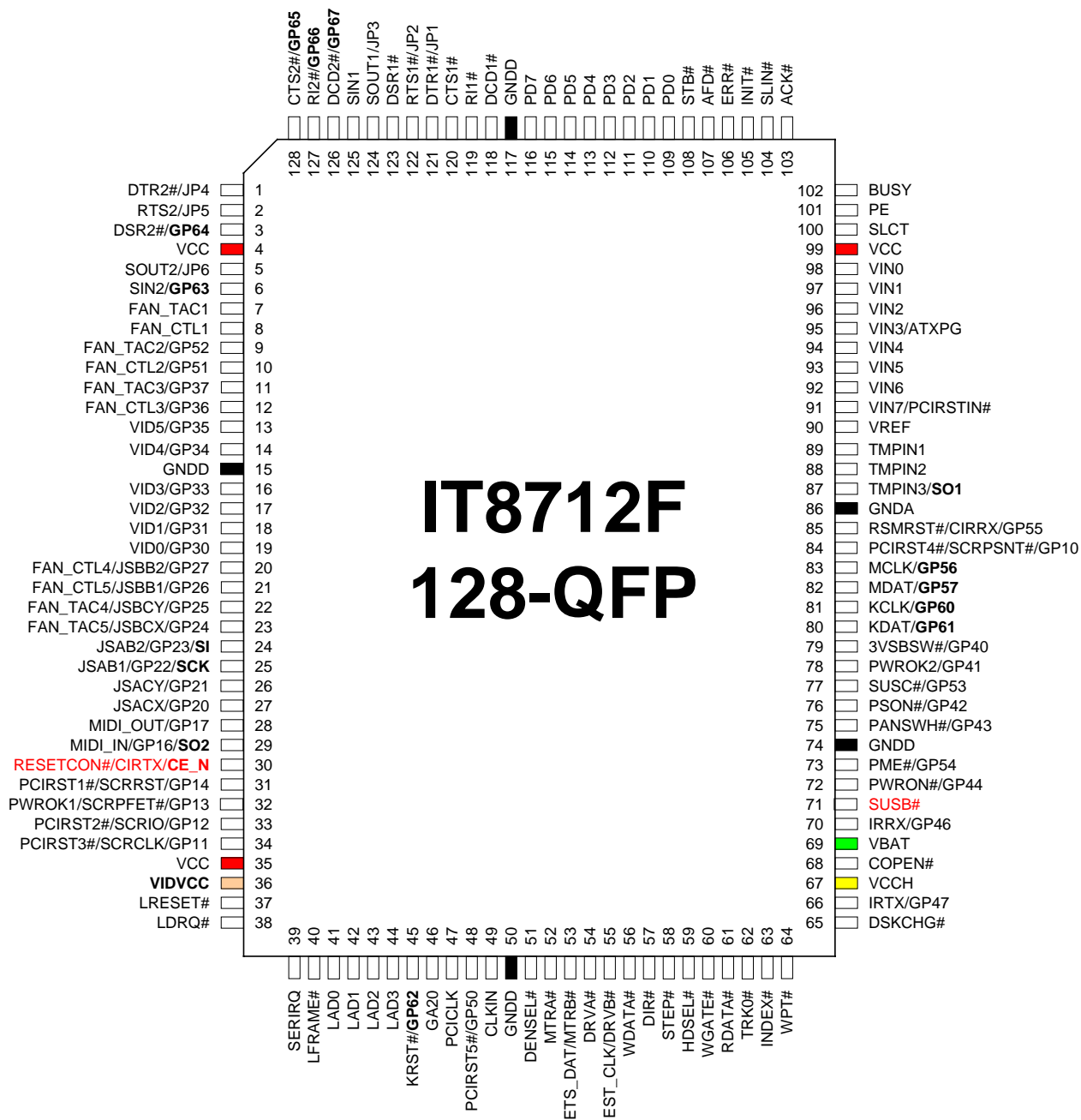


## Errata V0.1 for IT8712F V0.9.1

Note: The corrections have been highlighted in red in the corresponding page attached.

Errata Version	Section	Correction	Page
0.1	4, 5, 6, 8	<ul style="list-style-type: none"><li>• For pin30, "GP15" was removed.</li><li>• For pin71, "GP45" was removed.</li></ul>	7, 8, 15, 23, 25, 26, 41, 43, 70

## 4. Pin Configuration



Top View

Table 4-1. Pins Listed in Numeric Order

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	DTR2#/JP4	33	PCIRST2#/SCRIO/GP12	65	DSKCHG#	97	VIN1
2	RTS2#/JP5	34	PCIRST3#/SCRC LK/GP11	66	IRTX/GP47	98	VIN0
3	DSR2#/GP64	35	VCC	67	VCCH	99	VCC
4	VCC	36	VIDVCC	68	COPEN#	100	SLCT
5	SOUT2/JP6	37	LRESET#	69	VBAT	101	PE
6	SIN2/GP63	38	LDRQ#	70	IRRX/GP46	102	BUSY
7	FAN_TAC1	39	SERIRQ	71	<b>SUSB#</b>	103	ACK#
8	FAN_CTL1	40	LFRAME#	72	PWRON#/GP44	104	SLIN#
9	FAN_TAC2/GP52	41	LAD0	73	PME#/GP54	105	INIT#
10	FAN_CTL2/GP51	42	LAD1	74	GNDD	106	ERR#
11	FAN_TAC3/GP37	43	LAD2	75	PANSWH#/GP43	107	AFD#
12	FAN_CTL3/GP36	44	LAD3	76	PSON#/GP42	108	STB#
13	VID5/GP35	45	KRST#/GP62	77	SUSC#/GP53	109	PD0
14	VID4/GP34	46	GA20	78	PWROK2/GP41	110	PD1
15	GNDD	47	PCICLK	79	3VSBSW#/GP40	111	PD2
16	VID3/GP33	48	PCIRST5#/GP50	80	KDAT/GP61	112	PD3
17	VID2/GP32	49	CLKIN	81	KCLK/GP60	113	PD4
18	VID1/GP31	50	GNDD	82	MDAT/GP57	114	PD5
19	VID0/GP30	51	DENSEL#	83	MCLK/GP56	115	PD6
20	FAN_CTL4/JSBB2/GP27	52	MTRA#	84	PCIRST4#/SCRPSNT#/GP10	116	PD7
21	FAN_CTL5/JSBB1/GP26	53	ETS_DAT/MTRB#	85	RSMRST#/CIRRX/GP55	117	GNDD
22	FAN_TAC4/JSBCY/GP25	54	DRVA#	86	GNDA	118	DCD1#
23	FAN_TAC5/JSBCX/GP24	55	ETS_CLK/DRVB#	87	TMPIN3/SO1	119	RI1#
24	JSAB2/GP23/SI	56	WDATA#	88	TMPIN2	120	CTS1#
25	JSAB1/GP22/SCK	57	DIR#	89	TMPIN1	121	DTR1#/JP1
26	JSACY/GP21	58	STEP#	90	VREF	122	RTS1#/JP2
27	JSACX/GP20	59	HDSEL#	91	VIN7/PCIRSTIN#	123	DSR1#
28	MIDI_OUT/GP17	60	WGATE#	92	VIN6	124	SOUT1/JP3
29	MIDI_IN/GP16/SO2	61	RDATA#	93	VIN5	125	SIN1
30	<b>RESETCON#/CIRTX/CE_N</b>	62	TRK0#	94	VIN4	126	DCD2#/GP67
31	PCIRST1#/SCRRST/GP14	63	INDEX#	95	VIN3/ATXPG	127	RI2#/GP66
32	PWROK1/SCRPFET#/GP13	64	WPT#	96	VIN2	128	CTS2#/GP65

**Table 5-7. Pin Description of Infrared Port Signals**

Pin(s) No.	Symbol	Attribute	Power	Description
30	<b>RESETCON#/ CIRTX/ CE_N</b>	DI/ DOD8/ DIOD8	VCC	Reset Connect # / Consumer Infrared Transmit Output / Serial Flash Chip Enable. <ul style="list-style-type: none"> <li>The first function of this pin is Reset Connect #. It connects to reset button, and also other reset source on the motherboard.</li> <li>The second function of this pin is Consumer Infrared Transmit Output.</li> <li>The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>
85	<b>RSMRST#/ CIRR#/ GP55</b>	DOD8/ DI/ DIOD8	VCCH	Resume Reset # / Consumer Infrared Receive Input / General Purpose I/O 55. <ul style="list-style-type: none"> <li>The first function of this pin is Resume Reset #. It is power good signal of VCCH. The high threshold is 4V <math>\pm</math> 0.2V, and the low threshold is 3.5V <math>\pm</math> 0.2V</li> <li>The second function of this pin is Consumer Infrared Receive Input.</li> <li>The Third function of this pin is the General Purpose I/O Port 5 Bit 5.</li> <li>The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>
70	<b>IRRX/ GP46</b>	DI/ DIOD8	VCCH	Infrared Receive Input / General Purpose I/O 46. <ul style="list-style-type: none"> <li>The first function of this pin is Infrared Receive Input.</li> <li>The second function of this pin is the General Purpose I/O Port 4 Bit 6.</li> <li>The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>
66	<b>IRTX/ GP47</b>	DO8/ DIOD8	VCC	Infrared Transmit Output / General Purpose I/O 47. <ul style="list-style-type: none"> <li>The first function of this pin is Infrared Transmit output.</li> <li>The second function of this pin is the General Purpose I/O Port 4 Bit 7.</li> <li>The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>

**Table 5-8. Pin Description of Serial Port 1 Signals**

Pin(s) No.	Symbol	Attribute	Power	Description
125	<b>SIN1</b>	DI	VCC	Serial Data Input 1. This input receives serial data from the communications link.
124	<b>SOUT1/ JP3</b>	DO8/ DI	VCC	Serial Data Output 1. This output sends serial data to the communications link. This signal is set to a marking state (logic 1) after a Master Reset operation or when the device is in one of the Infrared communications modes. During LRESET#, this pin is input for JP3 power-on strapping option
123	<b>DSR1#</b>	DI	VCC	Data Set Ready 1 #. When the signal is low, it indicates that the MODEM or data set is ready to establish a communications link. The DSR# signal is a MODEM status input whose condition can be tested by reading the MSR register.
122	<b>RTS1#/ JP2</b>	DO8/ DI	VCC	Request to Send 1 #. When this signal is low, this output indicates to the MODEM or

Pin(s) No.	Symbol	Attribute	Power	Description
75	PANSWH#/ GP43	DI/ DIOD8	VCCH	Main Power Switch Button Input # / General Purpose I/O 43. <ul style="list-style-type: none"> <li>• The first function of this pin is Main Power Switch Button Input #.</li> <li>• The second function of this pin is the General Purpose I/O Port 4 Bit 3.</li> <li>• The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>
76	PSON#/ GP42	DOD8/ DIOD8	VCCH	Power Supply On-Off Output # / General Purpose I/O 42. <ul style="list-style-type: none"> <li>• The first function of this pin is Power Supply On-Off Control Output #.</li> <li>• The second function of this pin is the General Purpose I/O Port 4 Bit 2.</li> <li>• The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>
71	SUSB#	DI/ DIOD8	VCCH	SUSB # Input. <ul style="list-style-type: none"> <li>• The first function of this pin is SUSB # Input.</li> <li>• The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>
77	SUSC#/ GP53	DI/ DIOD8	VCCH	SUSC# Input / General Purpose I/O 53. <ul style="list-style-type: none"> <li>• The first function of this pin is SUSC# Input.</li> <li>• The second function of this pin is the General Purpose I/O Port 5 Bit 3.</li> <li>• The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>
78	PWROK2/ GP41	DOD8/ DIOD8	VCCH	Power OK 2 of VCC / General Purpose I/O 41. <ul style="list-style-type: none"> <li>• The first function of this pin is Power OK 2 of VCC.</li> <li>• The second function of this pin is the General Purpose I/O Port 4 Bit 1.</li> <li>• The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>
79	3VSBSW#/ GP40	DO8/ DIOD8	VCCH	3VSBSW# / General Purpose I/O 40. <ul style="list-style-type: none"> <li>• The first function of this pin is 3VSBSW#.</li> <li>• The second function of this pin is the General Purpose I/O Port 4 Bit 0.</li> <li>• The function configuration of this pin is determined by programming the software configuration registers.</li> </ul>

**Table 6-1. General Purpose I/O Group 1 (Set 1)**

Pin(s) No.	Symbol	Attribute	Description
84	PCIRST4#/SCRPSNT#/GP10	DOD8/DI/DIOD8	PCI Reset 4 # / Smart Card Present Detect # / General Purpose I/O 10.
34	PCIRST3#/SCRCLK/GP11	DOD8/DOD8/DIOD8	PCI Reset 3 # / Smart Card Clock / General Purpose I/O 11.
33	PCIRST2#/SCRIO/GP12	DOD8/DIOD8/DIOD8	PCI Reset 2 # / Smart Card Serial Data I/O / General Purpose I/O 12.
32	PWROK1/SCRPFET#/GP13	DOD8/DOD8/DIOD8	Power OK 1 of VCC / Smart Card Power FET Control Output # / General Purpose I/O 13.
31	PCIRST1#/SCRRST/GP14	DOD8/DOD8/DIOD8	PCI Reset 1 # / Smart Card Reset / General Purpose I/O 14.
30	RESETCON # /CIRTX/CE_N	DI/DOD8/DIOD8	Reset Connect # / Consumer Infrared Transmit Output/Serial Flash Chip Enable#
29	MIDI_IN/GP16/SO2	DI/DIOD8	MIDI Input / General Purpose I/O 16/Serial Flash Output Data 2.
28	MIDI_OUT/GP17	DO8/DIOD8	MIDI Output / General Purpose I/O 17.

**Table 6-2. General Purpose I/O Group 2 (Set 2)**

Pin(s) No.	Symbol	Attribute	Description
27	JSACX/GP20	DIOD8/DIOD8	Joystick A Coordinate X / General Purpose I/O 20.
26	JSACY/GP21	DIOD8/DIOD8	Joystick A Coordinate Y / General Purpose I/O 21.
25	JSAB1/GP22/SCK	DI/DIOD8	Joystick A Button 1 / General Purpose I/O 22/ Serial Flash Clock.
24	JSAB2/GP23/SI	DI/DIOD8	Joystick A Button 2 / General Purpose I/O 23/ Serial Flash In Data.
23	FAN_TAC5/JSBCX/GP24	DI/DIOD8/DIOD8	Joystick B Coordinate X / General Purpose I/O 24.
22	FAN_TAC4/JSBCY/GP25	DI/DIOD8/DIOD8	Joystick B Coordinate Y / General Purpose I/O 25.
21	FAN_CTL5/JSBB1/GP26	DOD8/DI/DIOD8	Joystick B Button 1 / General Purpose I/O 26.
20	FAN_CTL4/JSBB2/GP27	DOD8/DI/DIOD8	Joystick B Button 2 / General Purpose I/O 27.

**Table 6-3. General Purpose I/O Group 3 (Set 3)**

Pin(s) No.	Symbol	Attribute	Description
19	VID0/GP30	DIO8/DIOD8	Voltage ID 0 / General Purpose I/O 30.
18	VID1/GP31	DIO8/DIOD8	Voltage ID 1 / General Purpose I/O 31.

Pin(s) No.	Symbol	Attribute	Description
17	VID2/GP32	DIO8/DIO D8	<i>Voltage ID 2 / General Purpose I/O 32.</i>
16	VID3/GP33	DIO8/DIO D8	<i>Voltage ID 3 / General Purpose I/O 33.</i>
14	VID4/GP34	DIO8/DIO D8	<i>Voltage ID 4 / General Purpose I/O 34.</i>
13	VID5/GP35	DIO8/DIO D8	<i>Voltage ID 5 / General Purpose I/O 35.</i>
12	FAN_CTL3/ GP36	DOD8/ DIOD8	<i>Fan Control Output 3 / General Purpose I/O 36.</i>
11	FAN_TAC3/ GP37	DI/DIOD8	<i>Fan Tachometer Input 3 / General Purpose I/O 37.</i>

Table 6-4. General Purpose I/O Group 4 (Set 4)

Pin(s) No.	Symbol	Attribute	Description
79	3VSBSW#/ GP40	DOD8/DIO D8	<i>3VSBSW# / General Purpose I/O 40.</i>
78	PWROK2/ GP41	DOD8/DIO D8	<i>Power OK 2 of VCC / General Purpose I/O 41.</i>
76	PSON#/ GP42	DOD8/ DIOD8	<i>Power Supply On-Off Control Output # / General Purpose I/O 42.</i>
75	PANSWH#/ GP43	DI/DIOD8	<i>Main Power Switch Button Input # / General Purpose I/O 43.</i>
72	PWRON#/ GP44	DOD8/ DIOD8	<i>Power On Request Output # / General Purpose I/O 44.</i>
71	<b>SUSB#</b>	DI/DIOD8	<b>SUSB # Input.</b>
70	IRRX/GP46	DI/DIOD8	<i>Infrared Receive Input / General Purpose I/O 46.</i>
66	IRTX/GP47	DO8/ DIOD8	<i>Infrared Transmit Output / General Purpose I/O 47.</i>

Table 6-5. General Purpose I/O Group 5 (Set 5)

Pin(s) No.	Symbol	Attribute	Description
48	PCIRST5#/ GP50	DO8/ DIOD16	<i>PCIRST5# / General Purpose I/O 50.</i>
10	FAN_CTL2/ GP51	DOD8/ DIOD8	<i>Fan Control Output 2 / General Purpose I/O 51.</i>
9	FAN_TAC2/ GP52	DI/DIOD8	<i>Fan Tachometer Input 2 / General Purpose I/O 52.</i>
77	SUSC#/GP5 3	DI/DIOD8	<i>SUSC# Input / General Purpose I/O 53</i>
73	PME#/GP54	DOD8/ DIOD8	<i>Power Management Event # / General Purpose I/O 54.</i>
85	RSMRST#/ CIRR X/GP55	DOD8/ DI / DIOD8	<i>Resume Reset # / Consumer Infrared Receive Input / General Purpose I/O 55.</i>
83	MCLK/ GP56	DIOD24/ DIOD24	<i>PS/2 Mouse Clock/ General Purpose I/O 56.</i>
82	MDAT/ GP57	DIOD24/ DIOD24	<i>PS/2 Mouse Data/ General Purpose I/O 57.</i>

## 8.3.8 GPIO Set 1 Multi-Function Pin Selection Register (Index=25h, Default=01h)

If the enabled bits are not set, the multi-function pins will perform the original functions. On the other hand, if they are set, they will perform the GPIO functions. This register can be read from any LDN, but can only be written if LDN=07h.

Bit	Description
7	<b>Function Selection of pin 28</b> 0: MIDI Output (MIDI_OUT) 1: General Purpose I/O 17 (GP17)
6	<b>Function Selection of pin 29</b> 0: MIDI Input (MIDI_IN) 1: General Purpose I/O 16 (GP16)
5	<b>Function Selection of pin 30, if bit5 of index 2A is 1.</b> 0: Consumer Infrared Transmit Output (CIRTX) 1: <b>Reserved</b>
4	<b>Function Selection of pin 31, if bit4 of index 2A is 1.</b> 0: Smart Card Reset (SCRRST) 1: General Purpose I/O 14 (GP14)
3	<b>Function Selection of pin 32, if bit3 of index 2A is 1.</b> 0: Smart Card Power FET Control Output # 1: General Purpose I/O 13 (GP13)
2	<b>Function Selection of pin 33, if bit2 of index 2A is 1.</b> 0: Smart Card Serial Data I/O (SCRIO) 1: General Purpose I/O 12 (GP12)
1	<b>Function Selection of pin 34, if bit1 of index 2A is 1.</b> 0: Smart Card Clock (SCRCLK) 1: General Purpose I/O 11 (GP11)
0	<b>Function Selection of pin 84, if bit0 of index 2A is 1.</b> 0: Smart Card Present Detect# (SCRPSNT#) 1: General Purpose I/O 10 (GP10)

3	<b>Function Selection of pin 16</b> 0: Voltage ID3 (VID3) 1: General Purpose I/O 33 (GP33)
2	<b>Function Selection of pin 17</b> 0: Voltage ID2 (VID2) 1: General Purpose I/O 32 (GP32)
1	<b>Function Selection of pin 18</b> 0: Voltage ID1 (VID1) 1: General Purpose I/O 31 (GP31)
0	<b>Function Selection of pin 19</b> 0: Voltage ID0 (VID0) 1: General Purpose I/O 30 (GP30)

### 8.3.8 GPIO Set 4 Multi-Function Pin Selection Register (Index=28h, Default=40h)

If the enabled bits are not set, the multi-function pins will perform the original functions. On the other hand, if they are set, they will perform the GPIO functions. This register can be read from any LDN, but can only be written if LDN=07h.

Bit	Description
7	<b>Function Selection of pin 66</b> 0: Infrared Transmit Output (IRTX). 1: General Purpose I/O 47 (GP47).
6	<b>Function Selection of pin 70</b> 0: Infrared Receive Input (IRRX). 1: General Purpose I/O 46 (GP46).
5	<b>Function Selection of pin 71</b> 0: SUSB#. 1: <b>Reserved</b>
4	<b>Function Selection of pin 72</b> 0: Power On Request Output # (PWRON#). 1: General Purpose I/O 44 (GP44).
3	<b>Function Selection of pin 75</b> 0: Main Power Switch Button Input # (PANSWH#). 1: General Purpose I/O 43 (GP43).
2	<b>Function Selection of pin 76</b> 0: Power Supply ON-Off Control Output # (PSON#). 1: General Purpose I/O 42 (GP42).
1	<b>Function Selection of pin 78</b> 0: PWROK2. 1: General Purpose I/O 41 (GP41).
0	<b>Function Selection of pin 79</b> 0: 3VSBSW#. 1: General Purpose I/O 40 (GP40).

### 8.3.8 GPIO Set 5 Multi-Function Pin Selection Register (Index=29h, Default=00h)

If the enabled bits are not set, the multi-function pins will perform the original functions. On the other hand, if they are set, they will perform the GPIO functions. This register can be read from any LDN, but can only be written if LDN=07h.

### Note 3:

Except the standard mode, COM1 and COM2 cannot be selected in the same mode.

### Note 4: The Location mapping table

Location	Description
001 000	GP10 (pin 84). Powered by VCCH.
001 001	GP11 (pin 34).
001 010	GP12 (pin 33).
001 011	GP13 (pin 32).
001 100	GP14 (pin 31).
001 110	GP16 (pin 29).
001 111	GP17 (pin 28).
010 000	GP20 (pin 27).
010 001	GP21 (pin 26).
010 010	GP22 (pin 25).
010 011	GP23 (pin 24).
010 100	GP24 (pin 23).
010 101	GP25 (pin 22).
010 110	GP26 (pin 21).
010 111	GP27 (pin 20).
011 000	GP30 (pin 19).
011 001	GP31 (pin 18).
011 010	GP32 (pin 17).
011 011	GP33 (pin 16).
011 100	GP34 (pin 14).
011 101	GP35 (pin 13).
011 110	GP36 (pin 12).
011 111	GP37 (pin 11).
100 000	GP40 (pin 79). Powered by VCCH.
100 001	GP41 (pin 78). Powered by VCCH.
100 010	GP42 (pin 76). Powered by VCCH.
100 011	GP43 (pin 75). Powered by VCCH.
100 100	GP44 (pin 72). Powered by VCCH.
100 110	GP46 (pin 70). Powered by VCCH.
100 111	GP47 (pin 66).
101 000	GP50 (pin 48).
101 001	GP51 (pin 10).
101 010	GP52 (pin 9).
101 011	GP53 (pin 77). Powered by VCCH.
101 100	GP54 (pin 73). Powered by VCCH.
101 101	GP55 (pin 85). Powered by VCCH.
else	<b>Reserved</b>