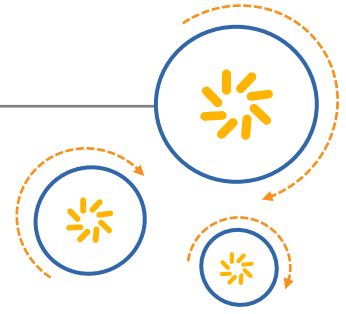




Qualcomm Technologies, Inc.



# Qualcomm® Snapdragon™ 410 processor GPIO Pin Assignment Spreadsheet

LM80-P0436-45 Rev. B

February 14, 2017

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## Revision history

Revision	Date	Description
B	2/14//2017	Added "Processor Allocation" column to table.
A	November 2015	Initial release

Pad #	MPM interrupt	Pad name	Pad Voltage	Pull (default:options)	Boot config	Alternate function 1	Alternate function 2	Alternate function 3	Alternate function 4	Processor Allocation
BA38		GPIO[0]	P3	PD:nppukp		BLSP1_SPI_MOSI	BLSP1_UART_TX		DMIC0_CLK	APPS
BB39	▶	GPIO[1]	P3	PD:nppukp		BLSP1_SPI_MISO	BLSP1_UART_RX		DMIC0_DATA	APPS
AV35		GPIO[2]	P3	PD:nppukp		BLSP1_SPI_CS_N	BLSP1_UART_CTS_N	BLSP1_I2C_SDA_A		APPS
AY37		GPIO[3]	P3	PD:nppukp		BLSP1_SPI_CLK	BLSP1_UART_RFR_N	BLSP1_I2C_SCL_A		APPS
AT9		GPIO[4]	P3	PD:nppukp		BLSP2_SPI_MOSI	BLSP2_UART_TX		BLSP1_SPI_CS3_N	APPS
AY1	▶	GPIO[5]	P3	PD:nppukp		BLSP2_SPI_MISO	BLSP2_UART_RX		BLSP2_SPI_CS3_N	APPS
AY3		GPIO[6]	P3	PD:nppukp		BLSP2_SPI_CS_N	BLSP2_UART_CTS_N	BLSP2_I2C_SDA_A		APPS
AV3		GPIO[7]	P3	PD:nppukp		BLSP2_SPI_CLK	BLSP2_UART_RFR_N	BLSP2_I2C_SCL_A		APPS
H5		GPIO[8]	P3	PD:nppukp		BLSP3_SPI_MOSI				APPS
G2	▶	GPIO[9]	P3	PD:nppukp		BLSP3_SPI_MISO				APPS
H1		GPIO[10]	P3	PD:nppukp		BLSP3_SPI_CS_N		BLSP3_I2C_SDA_A		APPS
E2	▶	GPIO[11]	P3	PD:nppukp		BLSP3_SPI_CLK		BLSP3_I2C_SCL_A		APPS
AM39	▶	GPIO[12]	P3	PD:nppukp		BLSP4_SPI_MOSI	GP_CLK_2B			APPS
AM35	▶	GPIO[13]	P3	PD:nppukp		BLSP4_SPI_MISO	GP_CLK_3B			APPS
AN40		GPIO[14]	P3	PD:nppukp		BLSP4_SPI_CS_N		BLSP4_I2C_SDA_A		APPS
AN36		GPIO[15]	P3	PD:nppukp		BLSP4_SPI_CLK		BLSP4_I2C_SCL_A		APPS
K7		GPIO[16]	P3	PD:nppukp		BLSP5_SPI_MOSI			BLSP1_SPI_CS2_N	APPS
G6		GPIO[17]	P3	PD:nppukp		BLSP5_SPI_MISO			BLSP2_SPI_CS2_N	APPS
J6		GPIO[18]	P3	PD:nppukp		BLSP5_SPI_CS_N		BLSP5_I2C_SDA_A		APPS
J4		GPIO[19]	P3	PD:nppukp		BLSP5_SPI_CLK		BLSP5_I2C_SCL_A		APPS
AY7	▶	GPIO[20]	P3	PD:nppukp		BLSP6_SPI_MOSI	GP_PDM_0A			APPS
AW6	▶	GPIO[21]	P3	PD:nppukp		BLSP6_SPI_MISO	GP_PDM_1B			APPS
AV7		GPIO[22]	P3	PD:nppukp		BLSP6_SPI_CS_N		BLSP6_I2C_SDA_A		APPS
BA2		GPIO[23]	P3	PD:nppukp		BLSP6_SPI_CLK		BLSP6_I2C_SCL_A		APPS
AT5		GPIO[24]	P3	PD:nppukp		MDP_VSYNC_P				APPS
AU4	▶	GPIO[25]	P3	PD:nppukp		#DSI_RST#	GP_PDM_0B			APPS
H3		GPIO[26]	P3	PD:nppukp		CAM_MCLK0				APPS
C2		GPIO[27]	P3	PD:nppukp		CAM_MCLK1				APPS
F1	▶	GPIO[28]	P3	PD:nppukp		CAM1_RST_N				APPS
B3		GPIO[29]	P3	PD:nppukp		CAM_I2C0_SDA				APPS
F3		GPIO[30]	P3	PD:nppukp		CAM_I2C0_SCL				APPS
D3	▶	GPIO[31]	P3	PD:nppukp		CCI_TIMER0	GP_CLK0			APPS
D1		GPIO[32]	P3	PD:nppukp		CCI_TIMER1	GP_CLK1			APPS
G4		GPIO[33]	P3	PD:nppukp		CCI_ASYNC0				APPS
F5	▶	GPIO[34]	P3	PD:nppukp		CAM0_STANDBY_N				APPS
A4	▶	GPIO[35]	P3	PD:nppukp		CAM0_RST_N				APPS
C4	▶	GPIO[36]	P3	PD:nppukp		FLASH_LED_RESET				APPS
E4	▶	GPIO[37]	P3	PD:nppukp	BOOT_CONFIG8	BLSP3_SPI_CS2_N	FORCED_USB_BOOT			
B37	▶	GPIO[38]	P3	PD:nppukp		SD_CARD_DET_N	CCI_TIMER2			APPS
BC2		GPIO[39]	P3	PD:nppukp		BT_SSBI				WCNSS
BB5		GPIO[40]	P3	PD:nppukp		WLAN_DATA2				WCNSS
BB1		GPIO[41]	P3	PD:nppukp		WLAN_DATA1				WCNSS
BD3		GPIO[42]	P3	PD:nppukp		WLAN_DATA0				WCNSS

Pad #	MPM interrupt	Pad name	Pad Voltage	Pull (default:options)	Boot config	Alternate function 1	Alternate function 2	Alternate function 3	Alternate function 4	Processor Allocation
BA6		GPIO[43]	P3	PD:nppukp		WLAN_SET				WCNSS
BB3		GPIO[44]	P3	PD:nppukp		WLAN_CLK				WCNSS
AY5		GPIO[45]	P3	PD:nppukp		FM_SSBI				WCNSS
AY9		GPIO[46]	P3	PD:nppukp		FM_DATA				WCNSS
BA4		GPIO[47]	P3	PD:nppukp		BT_CTL				WCNSS
AW8		GPIO[48]	P3	PD:nppukp		BT_DATA				WCNSS
Y37	▶	GPIO[49]	P4	PD:nppukp		UIM3_DATA	GP_CLK_1A			
AA34	▶	GPIO[50]	P4	PD:nppukp		UIM3_CLK	GP_CLK_2A			
Y35	▶	GPIO[51]	P4	PD:nppukp		UIM3_RST	GP_CLK_3A			
AA38	▶	GPIO[52]	P3	PD:nppukp		UIM3_PRESENT	GP_PDM_1A			
L40		GPIO[53]	P6	PD:nppukp		UIM2_DATA				
K39	▶	GPIO[54]	P6	PD:nppukp		UIM2_CLK				
H39		GPIO[55]	P6	PD:nppukp		UIM2_RST				
AA36		GPIO[56]	P3	PD:nppukp		UIM2_PRESENT				
G40		GPIO[57]	P5	PD:nppukp		UIM1_DATA				
J40		GPIO[58]	P5	PD:nppukp		UIM1_CLK				
L38		GPIO[59]	P5	PD:nppukp		UIM1_RST				
Y39		GPIO[60]	P3	PD:nppukp		UIM1_PRESENT				
AL38		GPIO[61]	P3	PD:nppukp		UIM_BATT_ALARM				
G34	▶	GPIO[62]	P3	PD:nppukp		SMB_INT				
AJ40		GPIO[63]	P3	PD:nppukp		CDC_PDM0_CLK				APPs
AH39		GPIO[64]	P3	PD:nppukp		CDC_PDM0_SYNC				APPs
AK39		GPIO[65]	P3	PD:nppukp		CDC_PDM0_TX0				APPs
AJ38	▶	GPIO[66]	P3	PD:nppukp		CDC_PDM0_RX0				APPs
AK35		GPIO[67]	P3	PD:nppukp		CDC_PDM0_RX1				APPs
AL40	▶	GPIO[68]	P3	PD:nppukp		CDC_PDM0_RX2				APPs
L36	▶	GPIO[69]	P3	PD:nppukp		MAG_INT	BLSP3_SPI_CS3_N			APPs
AN38		GPIO[70]	P3	PD:nppukp		RFFE1_CLK				QDSP
AR38		GPIO[71]	P3	PD:nppukp		RFFE1_DATA				QDSP
AT39		GPIO[72]	P3	PD:nppukp		RFFE2_CLK				QDSP
AU40		GPIO[73]	P3	PD:nppukp		RFFE2_DATA				QDSP
AP37		GPIO[74]	P3	PD:nppukp		GRFC[0]	PA_ON0	RFFE3_CLK		QDSP
AV39		GPIO[75]	P3	PD:nppukp		GRFC[1]	PA_ON1			QDSP
AP35		GPIO[76]	P3	PD:nppukp		GRFC[2]	PA_ON2	RFFE3_DATA		QDSP
BC4		GPIO[77]	P3	PD:nppukp		GRFC[3]	PA_ON3			QDSP
BE4		GPIO[78]	P3	PD:nppukp		GRFC[4]	PA_ON4			QDSP
BC6		GPIO[79]	P3	PD:nppukp		GRFC[5]	PA_ON5			QDSP
BD5		GPIO[80]	P3	PD:nppukp	BOOT_CONFIG_0	GRFC[6]				QDSP
BD7		GPIO[81]	P3	PD:nppukp	BOOT_CONFIG_1	GRFC[7]				QDSP
BC38		GPIO[82]	P3	PD:nppukp	BOOT_CONFIG_2	GRFC[8]	PA0_RANGE0			QDSP
BC40		GPIO[83]	P3	PD:nppukp	BOOT_CONFIG_3	GRFC[9]	PA0_RANGE1			QDSP
BC8		GPIO[84]	P3	PD:nppukp	BOOT_CONFIG_4	GRFC[10]				QDSP
BE6		GPIO[85]	P3	PD:nppukp		GRFC[11]	SDC1_EMMC_1P2_EN			QDSP
BD39		GPIO[86]	P3	PD:nppukp	BOOT_CONFIG_5	GRFC[12]				QDSP
BB37		GPIO[87]	P3	PD:nppukp	BOOT_CONFIG_6	GRFC[13]				QDSP

Pad #	MPM interrupt	Pad name	Pad Voltage	Pull (default:options)	Boot config	Alternate function 1	Alternate function 2	Alternate function 3	Alternate function 4	Processor Allocation
BB35		GPIO[88]	P3	PD:nppukp	BOOT_CONFIG_7	GRFC[14]	PA1_RANGE0			QDSP
BD35		GPIO[89]	P3	PD:nppukp	BOOT_CONFIG_8	GRFC[15]	PA1_RANGE1			QDSP
BA32		GPIO[90]	P3	PD:nppukp	BOOT_CONFIG_9	GRFC[16]				QDSP
BE38		GPIO[91]	P3	PD:nppukp	BOOT_CONFIG_10	GRFC[17]				QDSP
AY33		GPIO[92]	P3	PD:nppukp	BOOT_CONFIG_11	GRFC[18]				QDSP
BD33		GPIO[93]	P3	PD:nppukp	BOOT_CONFIG_12	GRFC[19]				QDSP
BC34		GPIO[94]	P3	PD:nppukp	BOOT_CONFIG_13	GRFC[20]				QDSP
BB31		GPIO[95]	P3	PD:nppukp		GRFC[21]				QDSP
BC32		GPIO[96]	P3	PD:nppukp		EXT_GNSS_LNA_EN	GRFC[24]			QDSP
C38	▶	GPIO[97]	P3	PD:nppukp	BOOT_CONFIG_14	LCD_DRIVER_5V_EN	GP_CLK_1B			
A38	▶	GPIO[98]	P3	PD:nppukp		LCD_BL_EN	GP_PDM_2A			
BE34		GPIO[99]	P3	PD:nppukp		GSM0_TX_PHASE_D0				QDSP
BE36		GPIO[100]	P3	PD:nppukp		GSM0_TX_PHASE_D1				QDSP
BB33		GPIO[101]	P3	PD:nppukp		GSM1_TX_PHASE_D0				QDSP
BE32		GPIO[102]	P3	PD:nppukp		GSM1_TX_PHASE_D1				QDSP
AT35		GPIO[103]	P3	PD:nppukp		SSBI_WTR0_RX	rfe5_clk			QDSP
AW40		GPIO[104]	P3	PD:nppukp		SSBI_WTR0_TX	rfe5_data			QDSP
AU36		GPIO[105]	P3	PD:nppukp		SSBI_WTR1_RX	rfe4_clk			QDSP
AY39		GPIO[106]	P3	PD:nppukp		SSBI_WTR1_TX	rfe4_data			QDSP
H33	▶	GPIO[107]	P3	PD:nppukp		KYPD_SNS0				APPs
K35	▶	GPIO[108]	P3	PD:nppukp		KYPD_SNS1				
J34	▶	GPIO[109]	P3	PD:nppukp		KYPD_SNS2				
B39	▶	GPIO[110]	P3	PD:nppukp		BLSP1_SPI_CS1_N	MI2S_1_WS			APPs
C40	▶	GPIO[111]	P3	PD:nppukp						
AW36	▶	GPIO[112]	P3	PD:nppukp		MI2S_2_D1				
D39	▶	GPIO[113]	P3	PD:nppukp		MI2S_1_SCLK	GP_PDM_2B			APPs
E40	▶	GPIO[114]	P3	PD:nppukp		MI2S_1_D0				APPs
E38	▶	GPIO[115]	P3	PD:nppukp		GYRO_ACCEL_INT_N	MI2S_1_D1			APPs
AW38		GPIO[116]	P3	PD:nppukp		MI2S_1_MCLK				
AV37	▶	GPIO[117]	P3	PD:nppukp		MI2S_2_WS				APPs
AR36	▶	GPIO[118]	P3	PD:nppukp		MI2S_2_SCLK				APPs
BA40		GPIO[119]	P3	PD:nppukp		MI2S_2_D0				APPs
F39	▶	GPIO[120]	P3	PD:nppukp		BLSP3_SPI_CS1_N				APPs
G38	▶	GPIO[121]	P3	PD:nppukp		BLSP2_SPI_CS1_N	SD_WRITE_PROTECT			APPs

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