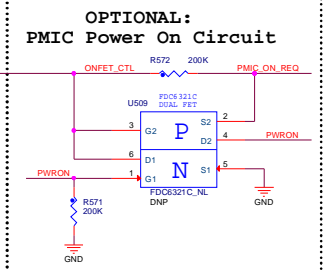


Note:
Bulk capacitors on VGEN1-6 are all 4.7uF for BOM consolidation purposes. Freescale recommended guidance for minimum capacitance on VGEN1, VGEN3, VGEN5, VGEN6 is 2.2uF.

Typical Power Requirements					
	Voltage	Power Up Sequence	Current Drawn (mA)	SYS 4V2 Current (mA)	NOTES
SW1A	1.375	1	2155	1001	
SW1B	1.375	1	2155	1001	
SW1C	1.375	2	1590	739	
SW2	3.3	5	653	728	
SW3A	1.5	3	1500	760	
SW3B	1.5	3	1500	760	
SW4	3.15	6	200	213	
SWBST	5.0	13	300	507	
VGEN1	1.5	9	100	0	Supplied from SW4
VGEN2	1.5	10	250	0	Supplied from SW4
VGEN3	2.8	11	70	66	
VGEN4	1.8	12	310	189	
VGEN5	2.8	10	75	71	See Note on Page 20
VGEN6	3.3	8	160	178	
VSNVS	3.0	0	0.2	0	
VREFDDR	0.75	3	10	3	
Total System Current Requirements:			4454		

SYSTEM POWER RAILS					
Voltage	Rail Name	Block	Generated By	Current Capability (mA)	NOTES
5.0	PMIC_5V	USB	PF0100 SWBST	600	
		HDMI			
3.3	GEN_3V3	SATA	MAX8815	2000	NVCC_LCD NVCC_EIM0/1/2 NVCC_GPIO NVCC_SD2/3 NVCC_NAND/F NAND_JTAG
		EMMC			
		SD3			
3.15	AUX_3V15	LVDS0	PF0100 SW2	1000	NVCC_ENET
		CAN			
2.8	VDDHIGH_IN	EXP HDR	PF0100 VGEN6	200	NVCC_ENET
		TOUCH			
2.5	GEN_2V5	GPS	PF0100 SW4	1000	Supplies: VGEN1 VGEN2
		IMX6			
1.8	GEN_1V8	CAMERA	PF0100 VGEN4	350	NVCC_SD1 NVCC_CSI
		ACC			
1.5	VGEN2_1V5	SATA	VDDHIGH_CAP	TBD	NVCC_MIPI
		HDMI			
1.375	VDDCORE	mPCIe	PF0100 VGEN1	100	
		MIPI			
0.75	VREFDDR	AUDIO	PF0100 SW3A/B	2500	
		CAMERA			
0.75	VDDSOC	ARMCORE	PF0100 SW1A/B	2500	
		VDDSOC			
0.75	VREFDDR	ARMCORE	PF0100 SW1C	1750	
		VDDSOC			
0.75	VREFDDR	DDR	PF0100 VREFDDR	10	
		DDR			



Note:
To turn off board "AUTO ON" feature, depopulate R30 and R31, and populate U509. This feature has not yet been tested.

freescale

ICAP Classification: FCP: PUB: X
 Drawing Title: **MCMX6Q-SMART DEVICE PLATFORM**
 Page Title: **PF0100 PMIC**
 Size C Document Number: SOURCE:SCH-27392 PDF:SPF-27392 Rev C5
 Date: Monday, February 16, 2015 Sheet 19 of 25

Note:
MMPF0100 Pass1.0 through Pass1.2 are subject to boot issues if power is removed from the board and reapplied within ~ 2 minutes. MMPF0100 Pass2.0 will correct this issue. For more details, see the MMPF0100 ERRATA, Issue #ER19