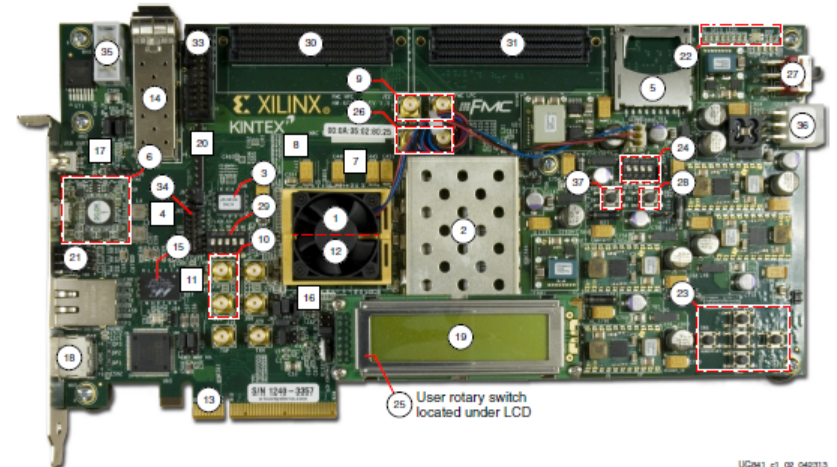


# Schematics

## TI Power Reference Design for Xilinx® Kintex®-7

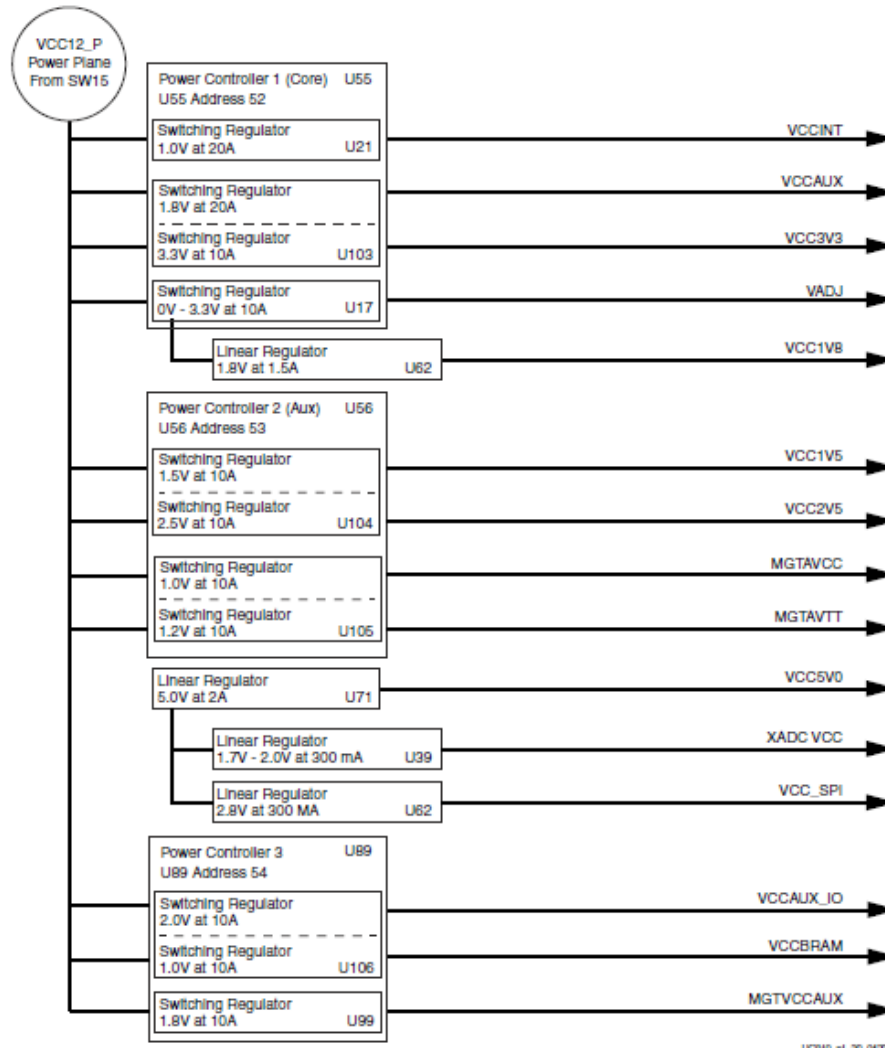
# Xilinx Kintex-7 FPGA KC705 Evaluation Kit

- Schematic for KC705  
[link](#)



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# KC705 Evaluation Kit Power Tree - 1



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# KC705 Evaluation Kit Power Tree - 2

Device Type	Reference Designator	Description	Power Rail Net Name	Power Rail Voltage	Schematic Page
<b>Core voltage controller and regulators</b>					
UCD9248PPFC <sup>(1)</sup>	U55	PMBus Controller (Addr = 52)			36
PTD08A020W	U21	Adjustable switching regulator 20A, 0.6V to 3.6V	VCCINT_FPGA	1.00V	37
PTD08D021W (V <sub>OUT A</sub> )	U103	Adjustable switching regulator dual 10A, 0.6V to 3.6V	VCCAUX	1.80V	38
PTD08D021W (V <sub>OUT B</sub> )		Adjustable switching regulator dual 10A, 0.6V to 3.6V	VCC3V3	3.30V	38
PTD08A010W	U17	Adjustable switching regulator 10A, 0.6V to 3.6V	VCC_ADJ	0-3.30V	39
<b>Auxiliary voltage controller and regulators</b>					
UCD9248PPFC <sup>(2)</sup>	U56	PMBus Controller (Addr = 53)			40
PTD08D021W (V <sub>OUT A</sub> )	U104	Adjustable switching regulator dual 10A, 0.6V to 3.6V	VCC2V5_FPGA	2.50V	41
PTD08D021W (V <sub>OUT B</sub> )		Adjustable switching regulator dual 10A, 0.6V to 3.6V	VCC1V5_FPGA	1.50V	41
PTD08D021W (V <sub>OUT A</sub> )	U105	Adjustable switching regulator dual 10A, 0.6V to 3.6V	MGTAVCC	1.00V	42
PTD08D021W (V <sub>OUT B</sub> )		Adjustable switching regulator dual 10A, 0.6V to 3.6V	MGTAVTT	1.20V	42
<b>UCD9248PPFC<sup>(3)</sup></b>					
UCD9248PPFC <sup>(3)</sup>	U89	PMBus Controller (Addr = 54)			43
PTD08D021W (V <sub>OUT A</sub> )	U106	Dual 10A 0.6V - 3.6V Adj. Switching Regulator	VCCAUX_IO	2.00V	44
PTD08D021W (V <sub>OUT B</sub> )		Dual 10A 0.6V - 3.6V Adj. Switching Regulator	VCCBRAM	1.00V	44
PTD08A010W	U99	10A 0.6V - 3.6V Adj. Switching Regulator	MGTVCCAUX	1.80V	45
<b>Linear regulators</b>					
LMZ12002	U71	Fixed Linear Regulator 2A	VCC5V0	5.00V	46
TL1962ADC	U62	Fixed Linear Regulator, 1.5A	VCC1V8	1.80V	46
ADP123	U17	Fixed Linear Regulator, 300mA	VCC_SPI	2.80V	46
ADP123	U18	Fixed Linear Regulator, 300mA	XADC_VCC	1.80V	31
TPS51200DR	U33	Tracking Regulator, 3A	VTTDDR	0.75V	46

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