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**Preliminary PCG-01009-1.0**

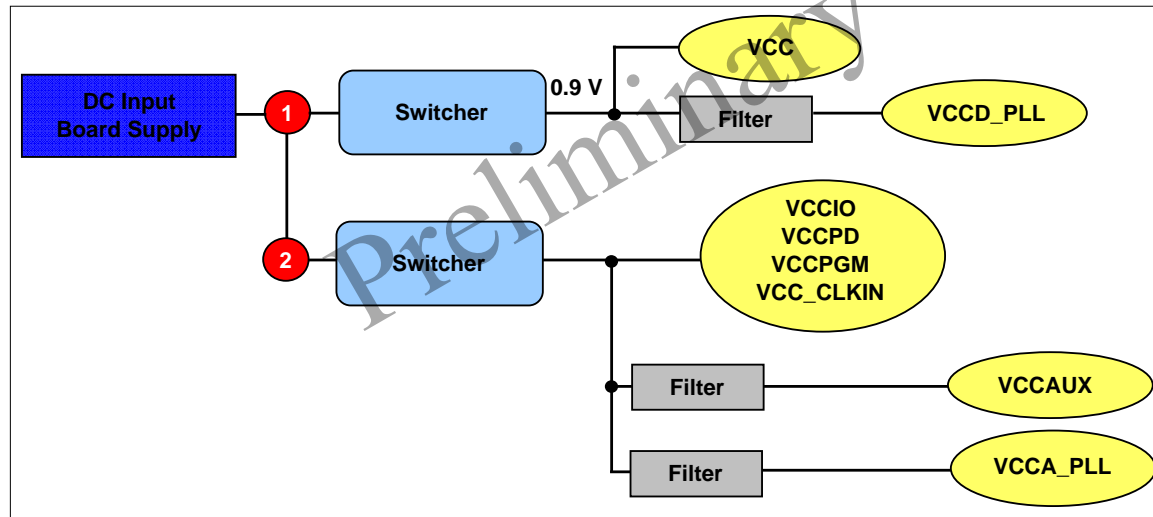
**Example 3. HardCopy IV E Power Supply Sharing Guidelines (non-transceiver device)**

**Example Requiring 2 Power Regulators**

Power Pin Name	Regulator Count	Voltage Level (V)	Supply Tolerance	Power Source	Regulator Sharing	Notes
VCC	1	0.9	± 30mV	Switcher	Share	May be able to share VCCD_PLL with VCC with a proper isolation filter. If not sharing the regulator with VCC the VCCD_PLL supply should not exceed a tolerance of ± 5%.
VCCD_PLL_[L,R][1:4], VCCD_PLL_[T,B][1:2]					Isolate	
VCCAUX	2	2.5	± 5%	Switcher	Isolate	May be able to share VCCD_PLL with VCCAUX with a proper isolation filter. Depending on the regulator capabilities this supply may be shared with multiple HardCopy IV devices. Use the EPE tool to assist in determining the power required for your specific design.
VCCA_PLL_[L,R][1:4], VCCA_PLL_[T,B][1:2]					Isolate	
VCC_CLKIN[3,4,7,8]C		Share				
VCCIO[1:8][A,C], VCCIO[2,3,4,5,7,8]B		Share				
VCCPD[1:8][A,C], VCCPD[2,3,4,5,7,8]B	2	Varies	± 5%	Switcher	Share > 2.5 V	If all of these supplies require 2.5 V and the regulator selected satisfies the power specifications then these supplies may all be tied in common. However, any other voltage requires a 2.5 V regulator for VCC_CLKIN and as many regulators as there are variations of supplies in your specific design. Use the EPE tool to assist in determining the power required for your specific design.
VCCPGM					Share > 2.5 V	

Each board design requires its own power analysis to determine the required power regulators needed to satisfy the specific board design requirements. An example block diagram is provided in Figure 3.

Figure 3. Example HardCopy IV E Power Supplies Block Diagram



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Revision History

Revision	Description of Changes	Date
1.0	Initial Release.	11/13/2009

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