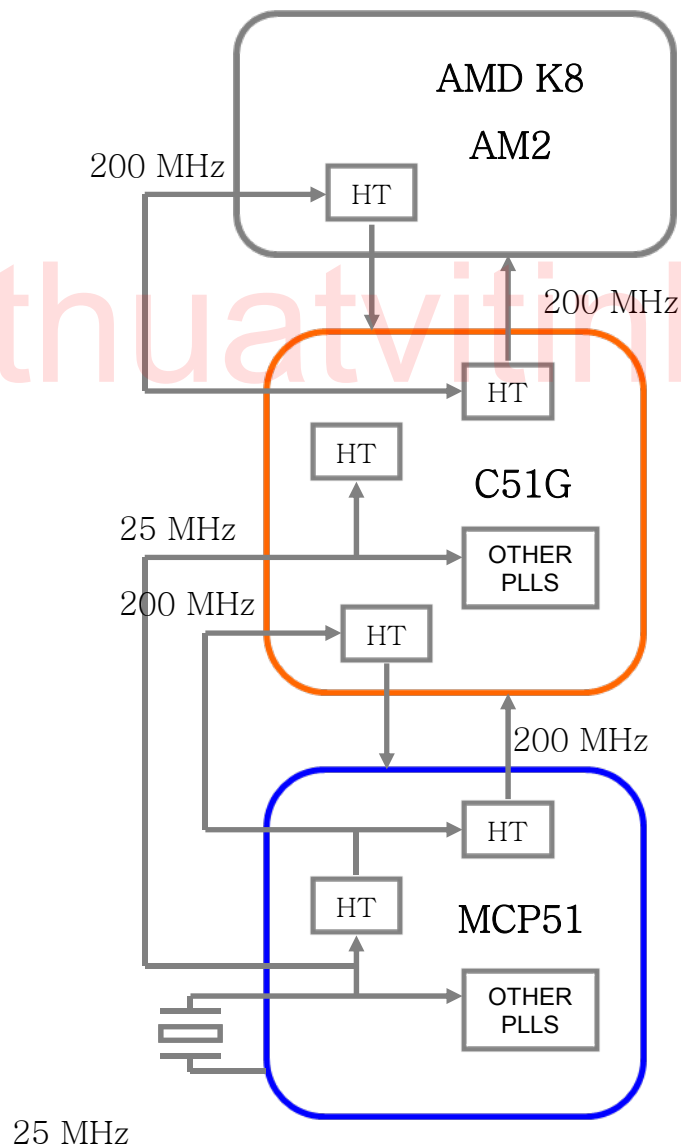
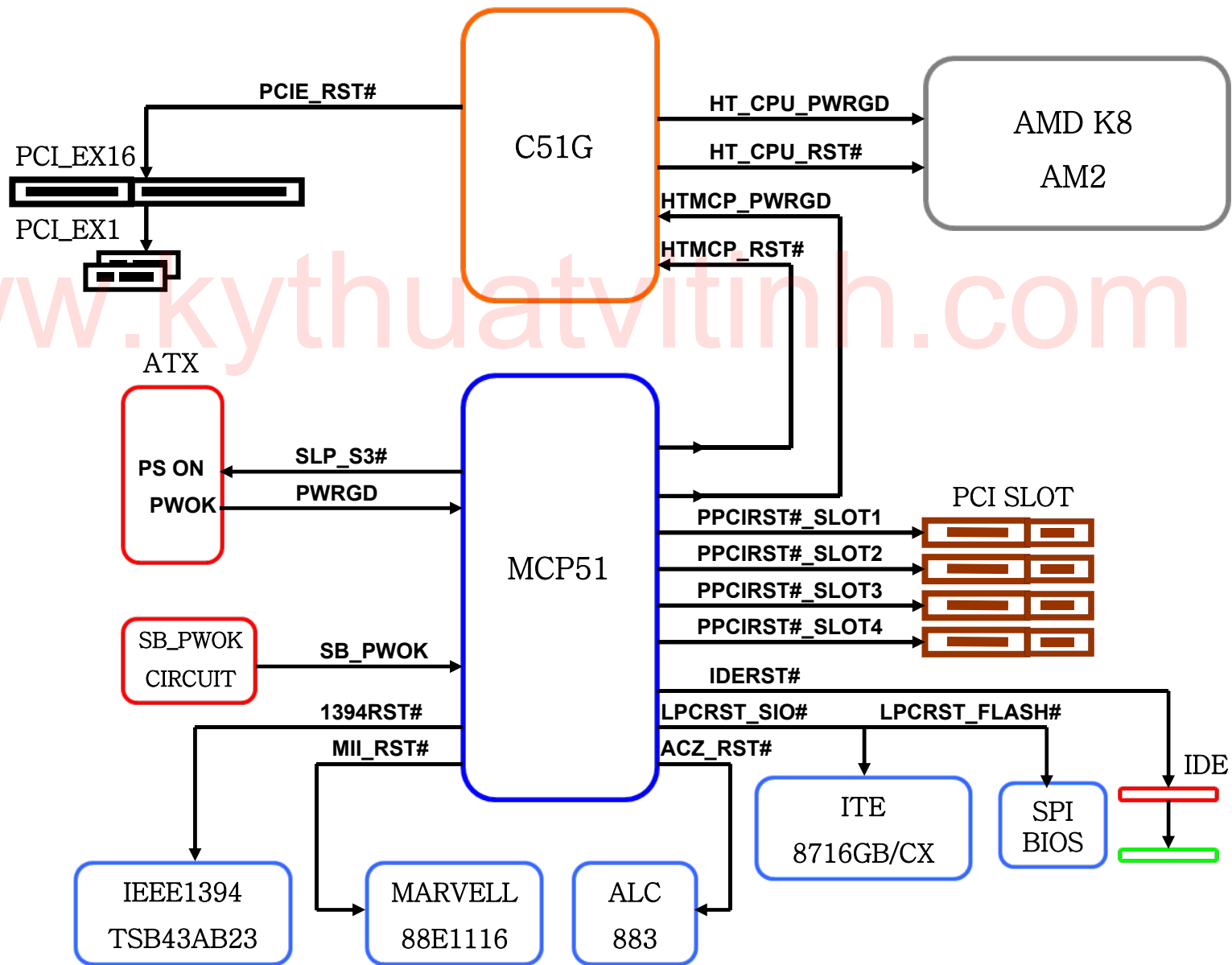


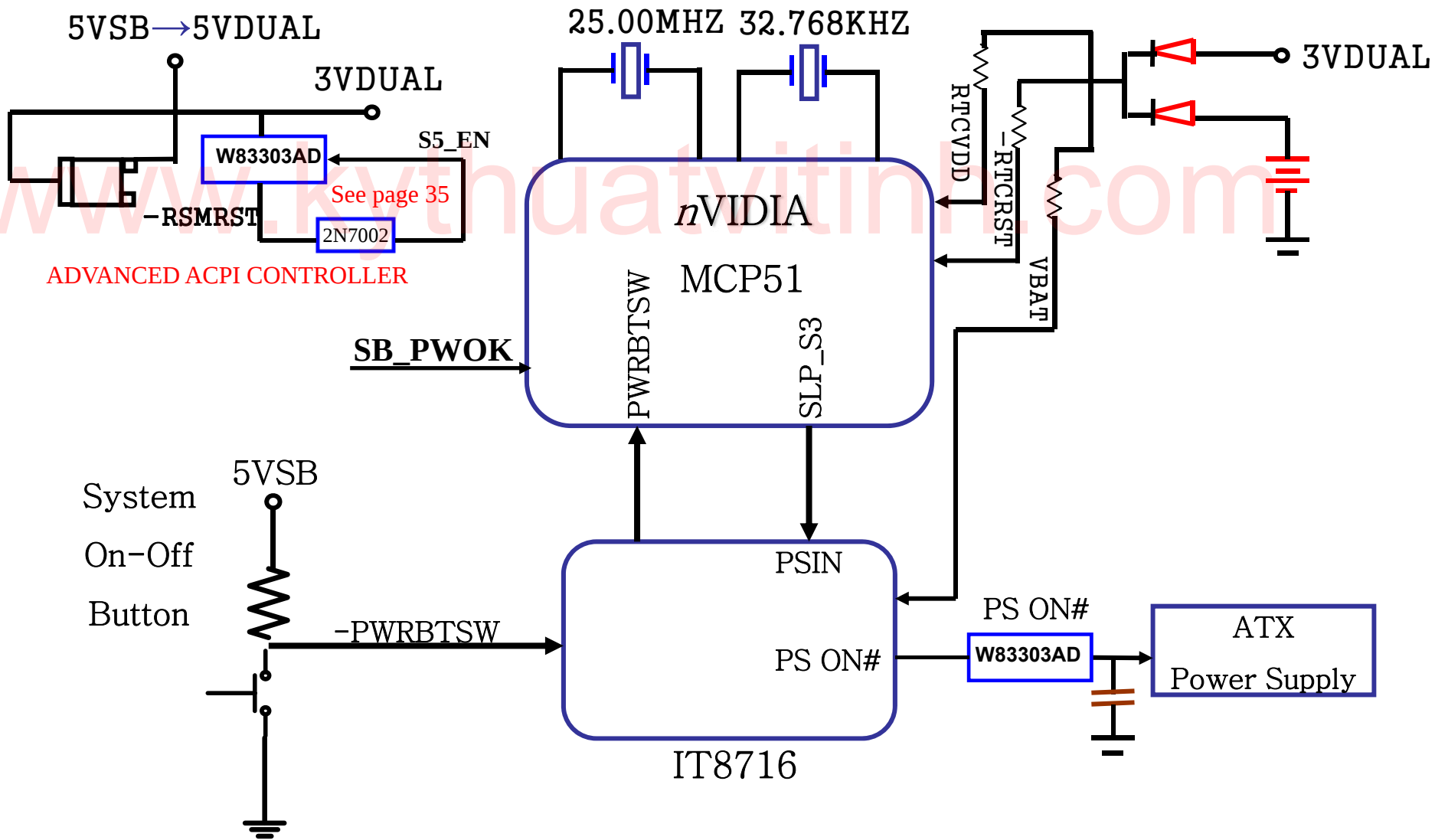


GA-M55plus-S3G

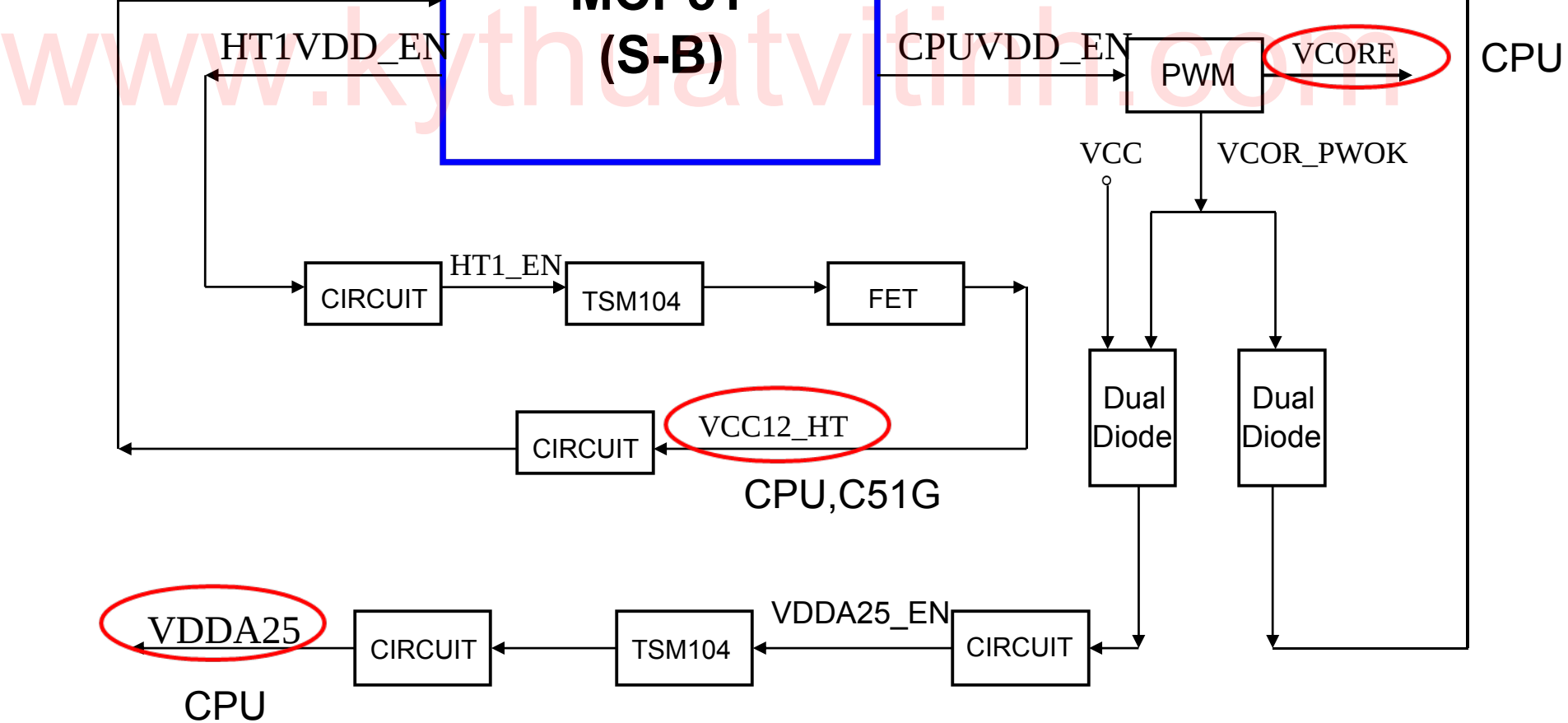


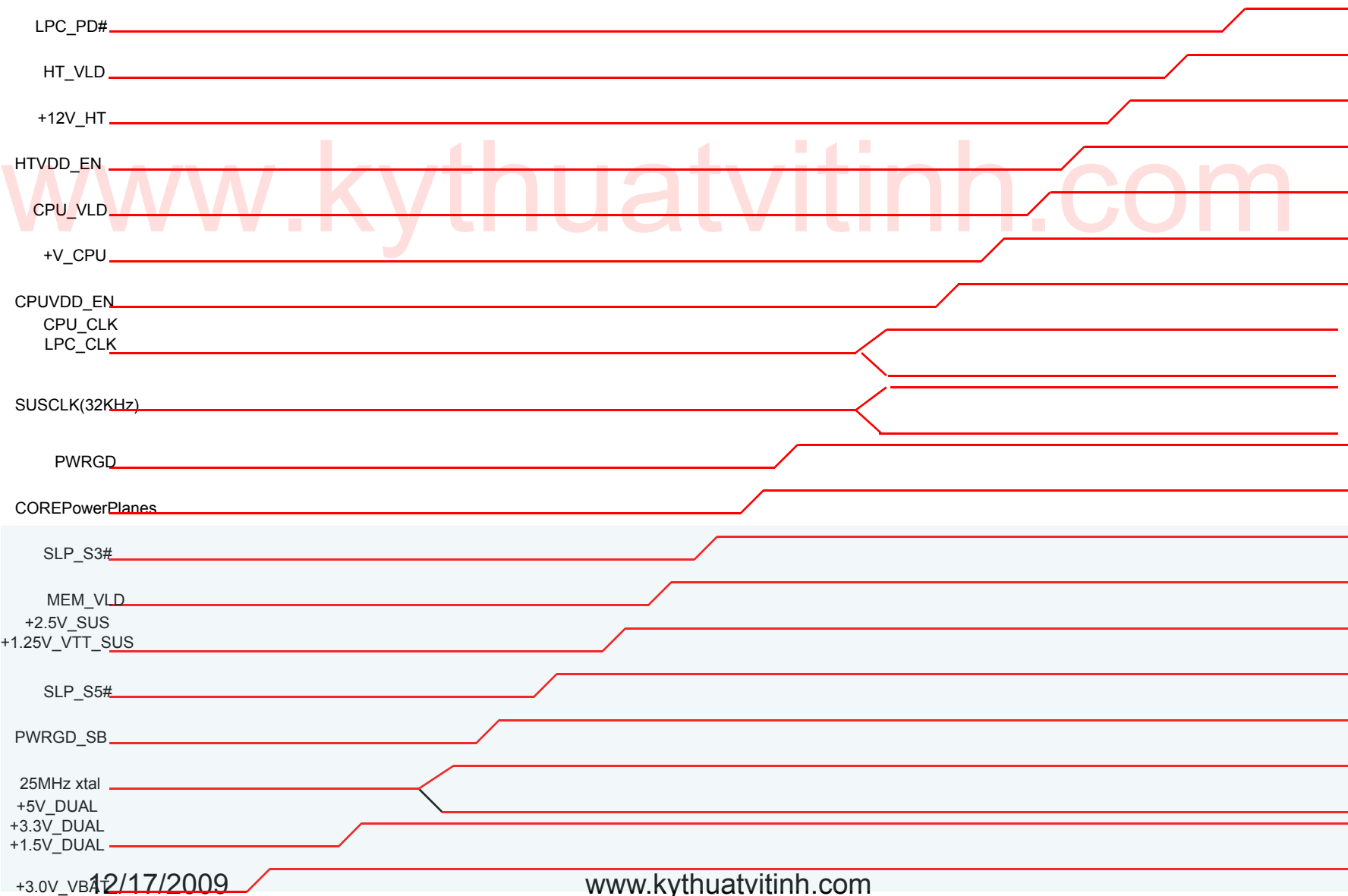
Introduction





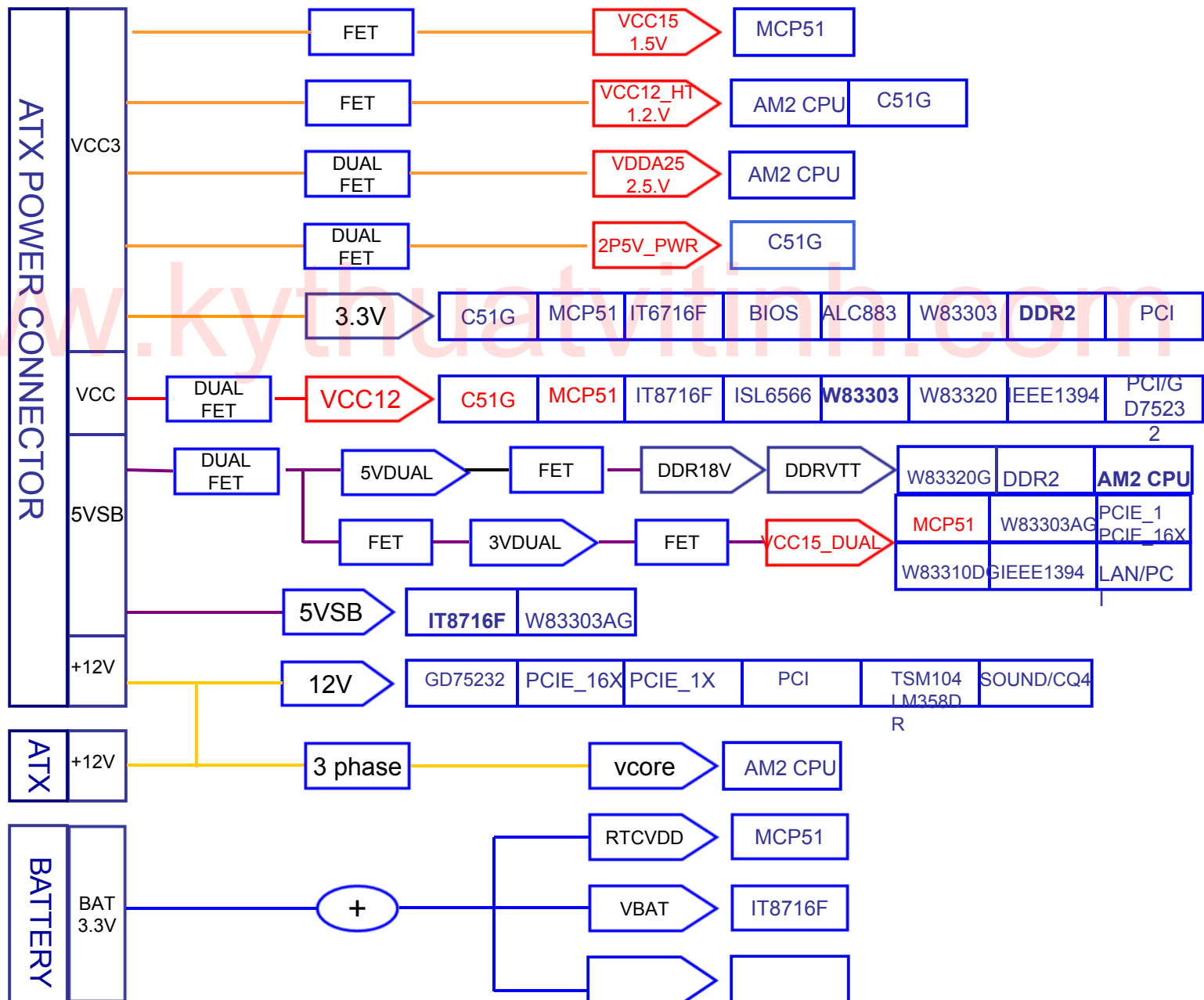
K8 Power Sequence

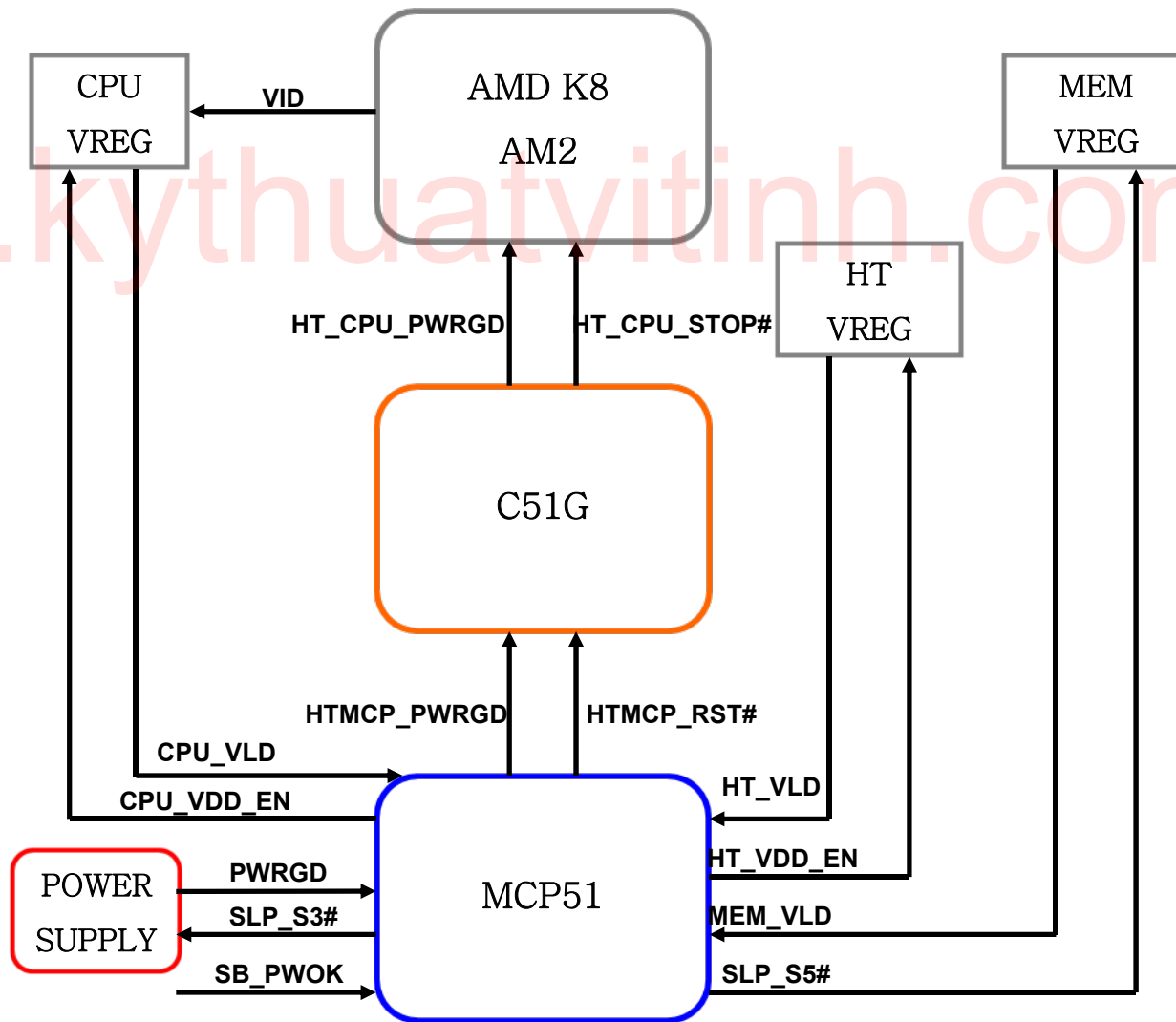


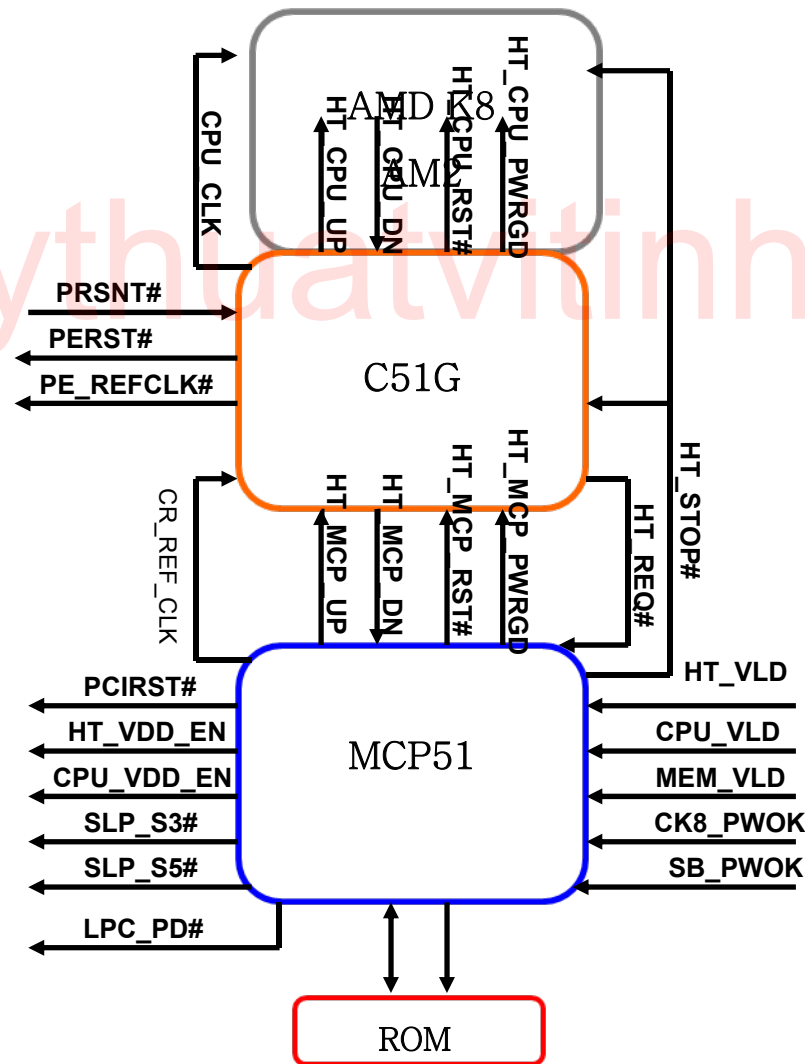


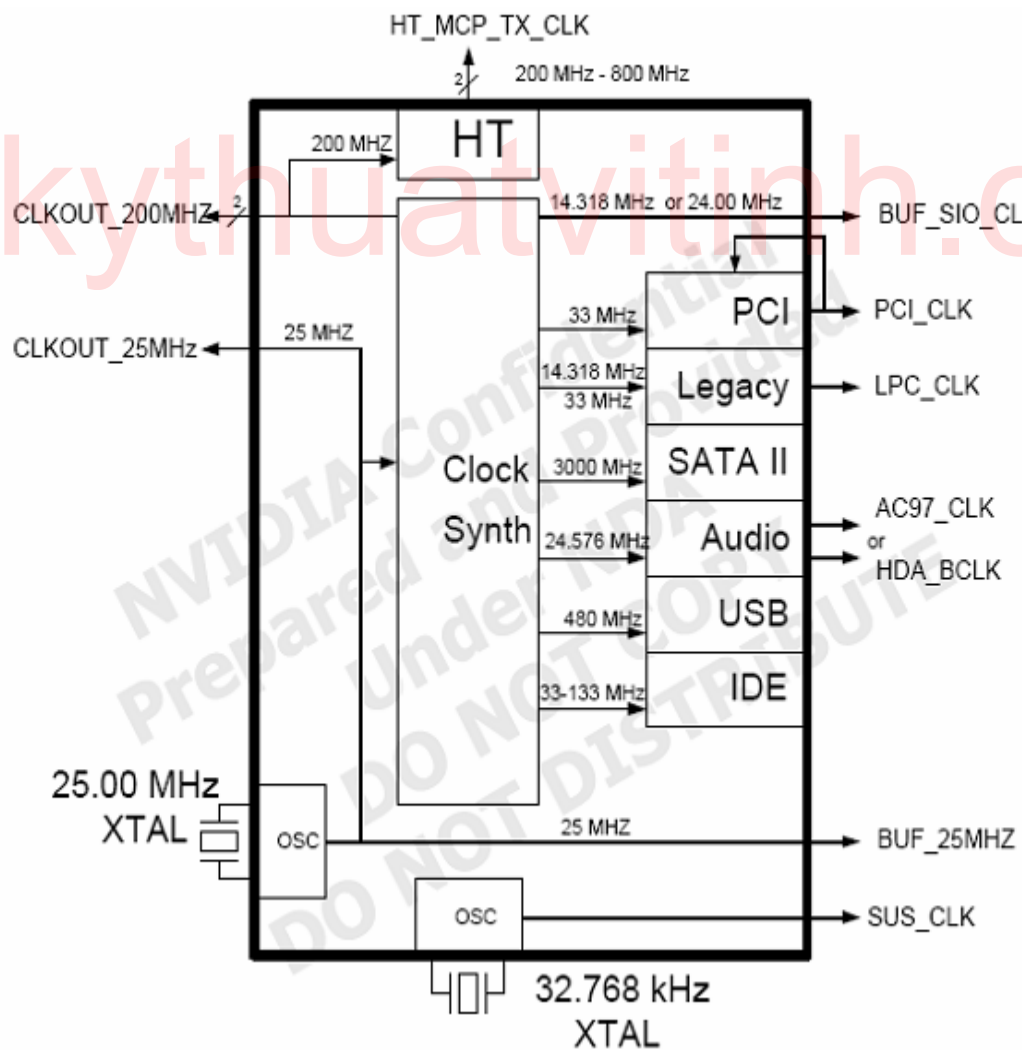
12/17/2009

Sym	Parameter	Min	Max	Units	Notes
PS100	+3.0VBAT active to +V_DUAL active	0		ms	1, 8
PS101	+V_DUAL active to XTAL OSC active	0	10	ms	1, 2
PS102	+V_DUAL active to PWRGD_SB assert	10		ms	5
PS104	PWRGD_SB assert to SLP_S5# de-assert	11	12	ms	3
PS105	SLP_S5# de-assert to +2.5V_SUS valid	0		ms	4, 6
PS106	+2.5V_SUS valid to MEM_VLD assert	0		ms	5
PS107	MEM_VLD assert to SLP_S3# de-assert	10	15	ms	3
PS108	SLP_S3# de-assert to VCC CORE planes valid	0		ms	1, 4, 8
PS109	VCC CORE planes valid to PWRGD assert	0		ms	5
PS110	PWRGD assert to CPU and LPC clocks active	50	73	ms	7
PS111	CPU and LPC clocks active to CPUVDD_EN assert	10	31	ms	3
PS112	CPUVDD_EN assert to +V_CPU valid	0		ms	4
PS113	+V_CPU valid to VRM_PWRGD assert	0		ms	5
PS114	VRM_PWRGD assert to HTVDD_EN assert	10	15	ms	3
PS115	HTVDD_EN assert to +1.2V_HT valid	0		ms	4
PS116	+1.2V_HT valid to HT_VLD assert	0		ms	5
PS120	+V_DUAL active to power plane controls valid		10	ms	
PS121	VCC CORE planes valid to power state controls valid		1	ms	
PS122	HT_VLD to power state controls de-assert		12	ms	









CPU Power Supply Interface Signals

Signal	Voltage	Definition	Remark
VCORE (VDD)	1.5V	Core power supply	
VCC12_HT/HT12B (VLDT_A)	1.2V	Hyper Transport I/O ring power supplies	
VDD25 (VDDA)	2.5V	Filtered PLL Supply Voltage	
DDR18V(VDDIO)	1.8V	DDR SDRAM I/O ring power supply	
DDRVTT (VTT)	0.9V	VTT Regulator voltage	
CPU_M_VREF (M_VREF)	VREF	DRAM Interface Voltage Reference	
COREFB_H/L (VDD_FB_H/L)	A	Differential feedback for VDD Power Supply	

C51XE Power Supply Interface Signals

Signal	Voltage	Definition	Remark
VCC12 (+ 1.2V_COR E)	1.6V	Core Power Rail ,this power plane is for the C51G core	
VCC12_HT (+ 1.2V_HT)	1.2V	Isolated Hyper Transport power rail	
2P5V_PWR (+ 2.5V_COR E)	2.5V	2.5V Core Power, this voltage is used to power the core logic of the C51G	
1P2VPLL_PW R (+ 12V_PLL)	1.2V	+ 1.2V Voltage, this is a filtered version of the + 1.2V_ core voltage.	
1P2VPEA_P WR (+ 12V_PEA)	1.2V	+ 1.2V Voltage, provides power to the PCI Express integrated into the C51G	

MCP55P Power Supply Interface Signals

Signal	Voltage	Definition	Remark
RTCVDD (+ 3.3V_VBAT)	3.3V	RTC Power well ,Battery backed-up power plane on the onboard Real Time Clock.	
+ 5V_DUAL	5 V	Dual System Supply, The + 5V_SB supply powers this rail in low power status and the + 5V supply powers this rail during normal operation .	
+ 3.3V_DUAL	3.3 V	Dual Pad Supply, The + 5V_dual supply powers this rail in low power status and the + 3V supply powers this rail during normal operation .	
VCC15_DUAL (+ 1.2V_DUAL)	1.6 V	Dual Logic Supply, Power plane for the logic in the MCP51 that remains active in all system status .	
VCC12 (+ 1.2V) (+ 1.2V_HT)	1.6V	VCORE Logic Supply, Power plane for the core logic in MCP51 , also potentially used for Hyper Transport pad power.	

AMD K8 AM2 Power Sequencing Signals

Signal	I/O	Definition	Remark
MEM_VLD#	I	Memory + 2.5 V Power Valid This signal indicates that the DDR DRAM + 1.8 V power plane is valid.	
CPUVDD_EN	O	CPU VDD Enable This signal controls the voltage regulator controlling the CPU_VDD power plane.	
CPU_VLD#	I	CPU VDD Power Valid This signal indicates that the CPU VDD power plane is valid.	
HT1VDD_EN	O	Hyper Transport Link + 1.2V_HT Enable This signal controls the voltage regulator controlling the + 1.2V_HT power plane.	
HT1_VLD#	I	Hyper Transport Link + 1.2 V Power Valid This signal indicates that the + 1.2V_HT power plane is valid.	

