### PROCESSORS

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<th>REF DES</th>
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2.5V VOLTAGE REGULATOR

NOTE:
- OUTPUT=2.5V TXR FRAMESHIFTER.
- VOLTAGE=2.62VDC
- PEAK CURRENT OF TOTAL RAILS
- 12.68A WITH DIMM TERMINATION
- 9.24A WITHOUT DIMM TERMINATION

IRU3037CS
VREF=1.25VDC
VOUT=VREF*(R903+R905)/R905=2.62VDC

R903_P2
U900_GATE_L
U900_FEEDBACK
U900_VC_R
U900_VC
Q901_GATE

R904_P2
U900_GATE_H
U900_COMP
Q902_DRAIN
review the latest SMU specification

NOTE: Some primary and alternate functions may be required pull-ups that are not.

NOTE: A 100pF capacitor to the SMU AVSS is recommended.

NOTE: All analog inputs to SMU should have SMU_VREF as the same signal or use a pull-up circuit, but be sure that this will not affect other analog inputs such as AC adapter ID.

NOTE: All scaling inputs to SMU should have a 100pF capacitor to the SMU AVSS signal. Some of these capacitors are provided on this page.

NOTE: Some primary and alternate functions may require pull-ups that are not.

NOTE: Before using the latest SMU specification, ensure that all pull-ups are provided on another page.

NOTE: Read section 3.1 in the SMU manual.
**NOTE:**

Set output=1.5VDC for U3LITE Core

VOUT=VREF*(R2203+R2205)/R2205=1.53VDC

IRU3037CS VREF=1.25VDC

Set output=1.5VDC for U3LITE core

Set output=1.5VDC for U3LITE core

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Size: 300mm

Drawing number

Rev.

Sheet

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**U3LITE Core Power**

---

**Supplier:**

Apple Computer Inc.
other Shasta supplies. Power Sequencing:

- Different drive timing is appropriate PCI bus voltage and spec for 5V vs. 3.3V operation.

NOTE: PCI pads use the VIO supply to meet
- _PPVCORE_PWRON_SB (1.2V)
- _PP2V5_PWRON_SB
- _PP3V3_PWRON_SB
- _PPPCI64_PWRON_SB (to 5V or 3.3V)

Shasta max (est 06/30/03) current:

- I/O 3.3V - 3.3V - 220 mA (770 mW)
- DIGITAL - 1.2V - 950 mA (1175 mW)

For PCI_AD<31..0>

For PCI_AD<63..32>

- VIO2
- VDDP_KL
- VDDO25
- GND
- POWER
NOTE: CONNECT VR5001 PIN 9 TO GND PLANE.

VOUT=VREF*(R5004+R5005)/R5005=1.60 (OR 1.40) VDC

SET OUTPUT=1.40V FOR NV34
SET OUTPUT=1.60V FOR NV18B

VOUT=VREF=IRU3037CS VREF=1.25VDC
VOUT=VREF=(R5004+R5005)/R5005=1.60 (OR 1.40) VDC

PEAK CURRENT OF TOTAL RAILS 7.2A WITH NV34

NOTE:

PEAK CURRENT OF TOTAL RAILS 0.95A

VOUT=VREF=IRU3037CS VREF=1.25VDC
VOUT=VREF=(R5004+R5005)/R5005=1.60 (OR 1.40) VDC

GRAPHICS VREGS

NOTE: SET OUTPUT=1.5V

SC4215 VREF=0.8VDC

VOUT=VREF=(R5015+R5017)/R5017=1.5 VDC

PEAK CURRENT OF TOTAL RAILS 0.95A

NOTE:

PEAK CURRENT OF TOTAL RAILS 0.95A

VOUT=VREF=(R5015+R5017)/R5017=1.5 VDC

MIN_LINE_WIDTH=25MIL

MIN_NECK_WIDTH=10MIL

PEAK CURRENT OF TOTAL RAILS 0.95A

VOUT=VREF=(R5015+R5017)/R5017=1.5 VDC

MR2003 10UF 1206 CERM 6.3V 20%

C5009 1800UF TH-KZJ 6.3V 20%

C5052 10UF 1206 CERM 6.3V 20%

C5051 0.1UF 603 X7R 16V 20%

R5050 10K 402 MF 1/16W 1%

C5053 330UF SM-1 6.3V 20%

R5051 2.8K 402 MF 1/16W 1%

R5052 10K 402 MF 1/16W 1%

C5054 0.1UF 603 X7R 16V 20%

R5053 1K 402 MF 1/16W 1%

C5055 0.1UF 603 X7R 16V 20%

R5054 10K 402 MF 1/16W 1%

C5056 0.1UF 603 X7R 16V 20%

R5055 10K 402 MF 1/16W 1%
www.Vinafix.vn
Shasta HyperTransport

MOS

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THIS DOCUMENT OR ANY PORTION THEREOF MAY NOT BE COPIED, DUPLICATED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN CONSENT OF NEC CORPORATION."
SAME CONNECTORS & PINOUT AS

Q37 HYPERTRANSPORT BETWEEN GOLEM AND K2
ALL RESISTOR PACKS ARE 47 Ohm 1/16W 5%

PLACE CLOSE TO SHAFTA

AD<27> IS IDSEL FOR USB
AD<17> IS IDSEL FOR AIRPORT
SATA data pairs is 100 ohms.
Primary Max Sep:     9 mils inner
Length Tolerance:   50 mils
Line To Line:       15 mils

Page Notes

SATA: SATA

Net Spacing Type: SATA
Note: Design differential impedance for SATA data pair is 100 ohms.