Dreamcast Reset Diagram

1 Serial Port

4 Maples
(ex-B/U)

B/U: Option

8

4 Maple
Game Ports

Hitachi SH4
200MHz

core 1.8V
I/Os 3.3V

CPU

256 BGA

Program / Data - 16 Mbytes

SDRAM
64Mbit
100MHz
86 TSOP

SDRAM
64Mbit
100MHz
86 TSOP

3.3VDC

Reset

SRST

SRST becomes active
after power has stabilized
for a minimum of 300mS.

VideoLogic / NEC HOLLY

100MHz

core 2.5/3.3V
I/Os 3.3V

Graphic

Maple i/f

3.3V Input
tolerance

G2 Bus i/f
AICA,
modem,
Ext. Dev.

3.3V Input
tolerance

G1 Bus i/f
EIDE, ROM

5V Input
tolerance

500 TBGA

Texture / Framebuffer - 8Mbytes

SDRAM
16Mbit
100MHz
50 TSOP

SDRAM
16Mbit
100MHz
50 TSOP

SDRAM
16Mbit
100MHz
50 TSOP

SDRAM
16Mbit
100MHz
50 TSOP

Yamaha AICA

22/25MHz
3.3V

Audio / RTC

3.3V Input
tolerance

100 TQFP

Digital
Encoder
(NTSC/PAL)

ADAC/AMP

Wave - 2Mbytes

SDRAM
16Mbits
100MHz
50 TSOP

NTSC / PAL
S (Y+S, C)
RGB VGA
etc...

Expansion
Connector

GRESETN

Modem
33.6Kbps

Multi
Media
BOX

to SH4: 2.0VDC

1.8/3.3

3.3VDC

to HOLLY: 2.5VDC

2.5/3.3

3.3VDC

3.3VDC 5VDC 12VDC

Power Supply

100 - 125VAC,
50/60Hz

PLL

13.5MHz

ROM
16Mbit
8bit data

FLASH
1Mbit
8bit data

System / Configuration -
2Mbytes / 128Kbytes

Decode
& Buffer
RAM
128Kbytes

CD-ROM
Decoder

CAV
4x - 12x
GD-ROM

7-3