

## P71, NV17, 4Mx16 SDR, 64MB, RGB, TV-out, video capture, AGP4X

HISTORY:

X00: Adapted from P70, with memory from P60

X24: 1) Added FB clock terminators.

X26: 1) Changed LFH to new pinout.

X30: 1) Removed cap on FBACKE. 2) Changed FB clock terminators to 0402 packages.

X42: 1) Swapped power supply FETs

X45: 1) Added R606 in 12V supply to U600

X46: 1) Changed AGPSTOP pullup to 3.3V

2) Added linear regulator (U602) for frame buffer rail

X50: 1) Changed from integrated to discrete video filters

PCI DEVICE ID 0X0=0X171 FOR NV17-128D.



PAGE OVERVIEW

1 top (this) page

2 1. AGP interface, core decoupling

3 2.a NV17 Frame Buffer

4 2.b Frame Buffer 0..63

5 2.b Frame Buffer 64...127

6 3.a Dual DAC. 1st VGA

7 3.b Dual DAC, 2nd VGA

8 4. Panel

9 5.a TV-out, video capture, stereo

10 6. Power supply

11 7. BIOS, Strapping

Stuff Option Meaning

COMMON Common to all assemblies

Not normally present in NO STUFF any assembly

VIDCAP Video Capture

RGB Protection diodes on primary **RGB PROT** 

DAC outputs

Second DAC channel goes to LFH LFH

connector

Second DAC channel goes to S TV

Video connector as TV out

1117 Fixed 1117 linear regulator for A3.3V

1117\_ADJ Adjustable 1117 linear regulator for

NO 1117 Take A3.3V from system 3.3V

64B5N 64 Bit, 5 nS frame buffer 64B6N 64 Bit, 6 nS frame buffer 128B5N 128 Bit. 5 nS frame buffer 128B6N 128 Bit, 6 nS frame buffer

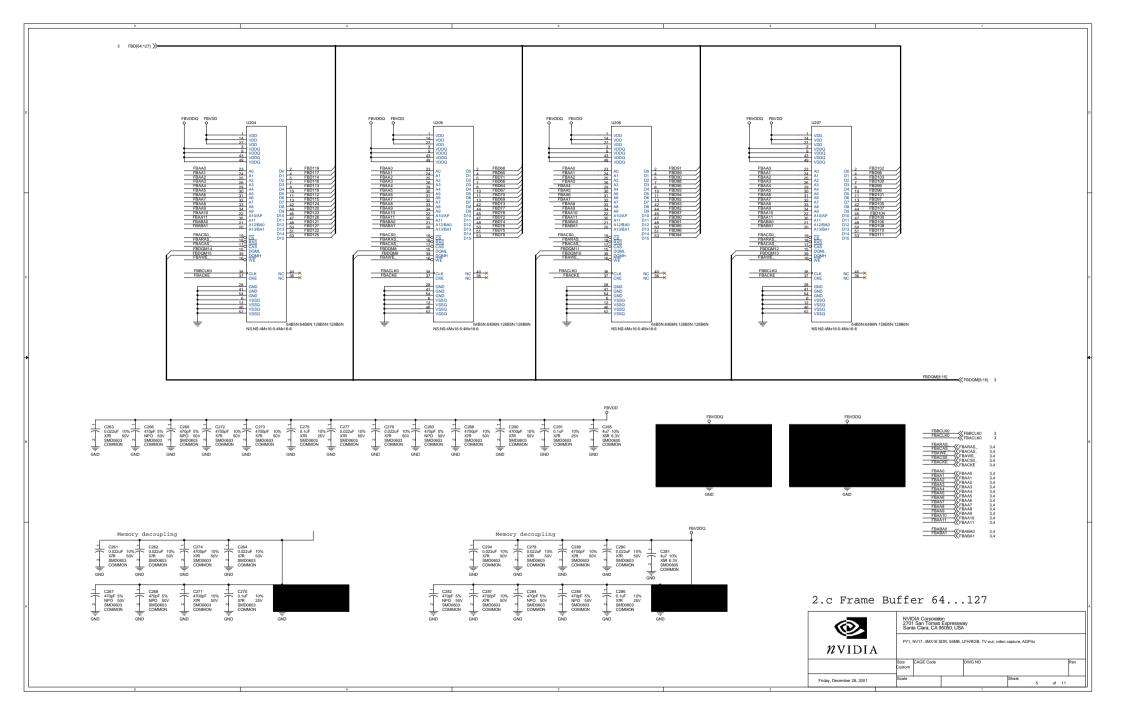
DESK Desktop system WKST Workstation system WKSTL Workstation Lite system

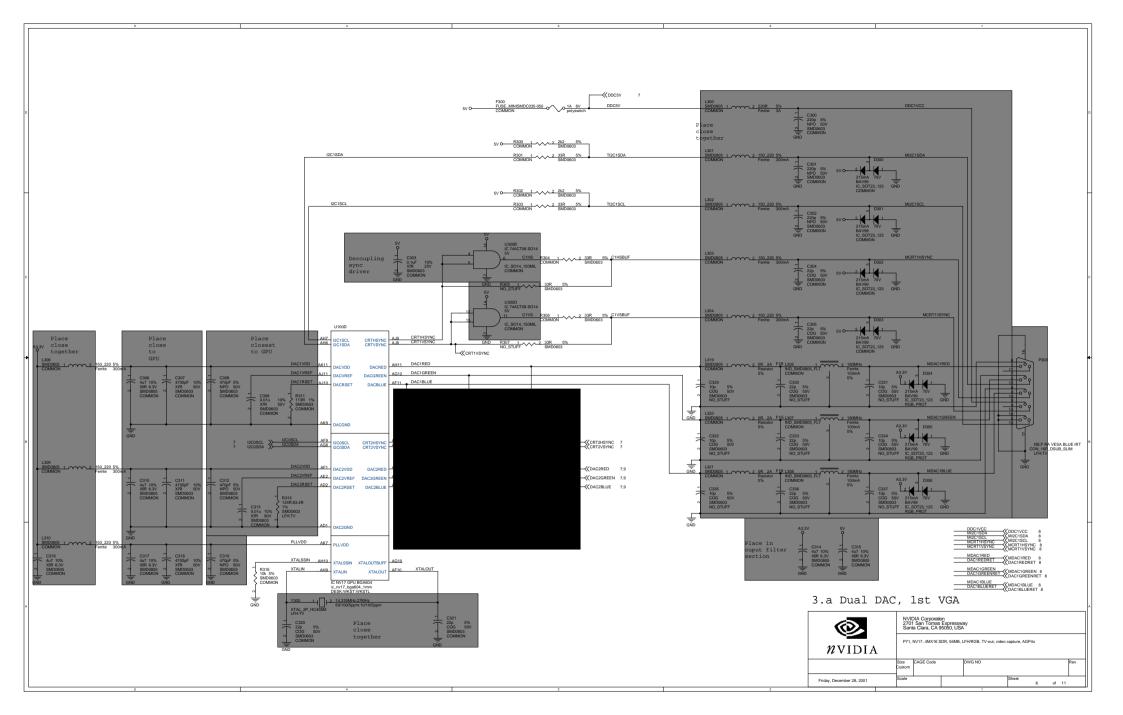
MEM33 Frame buffer voltage is AGP 3.3V

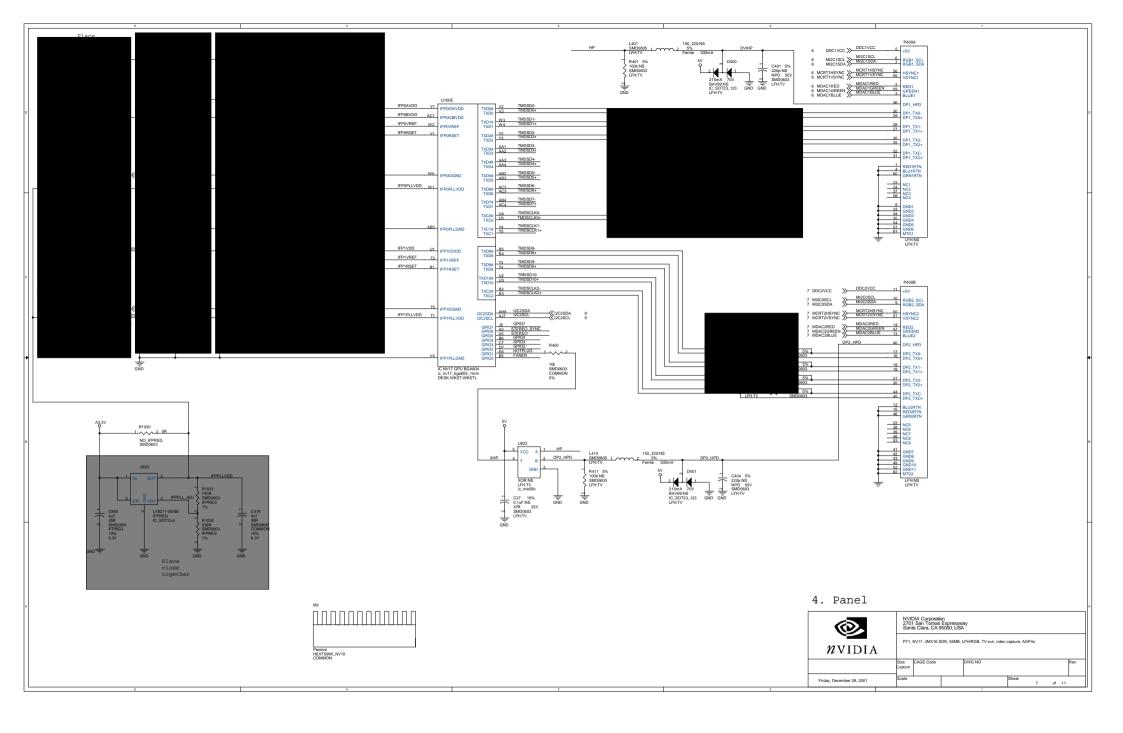
MEM30 Frame buffer voltage is independently regulated

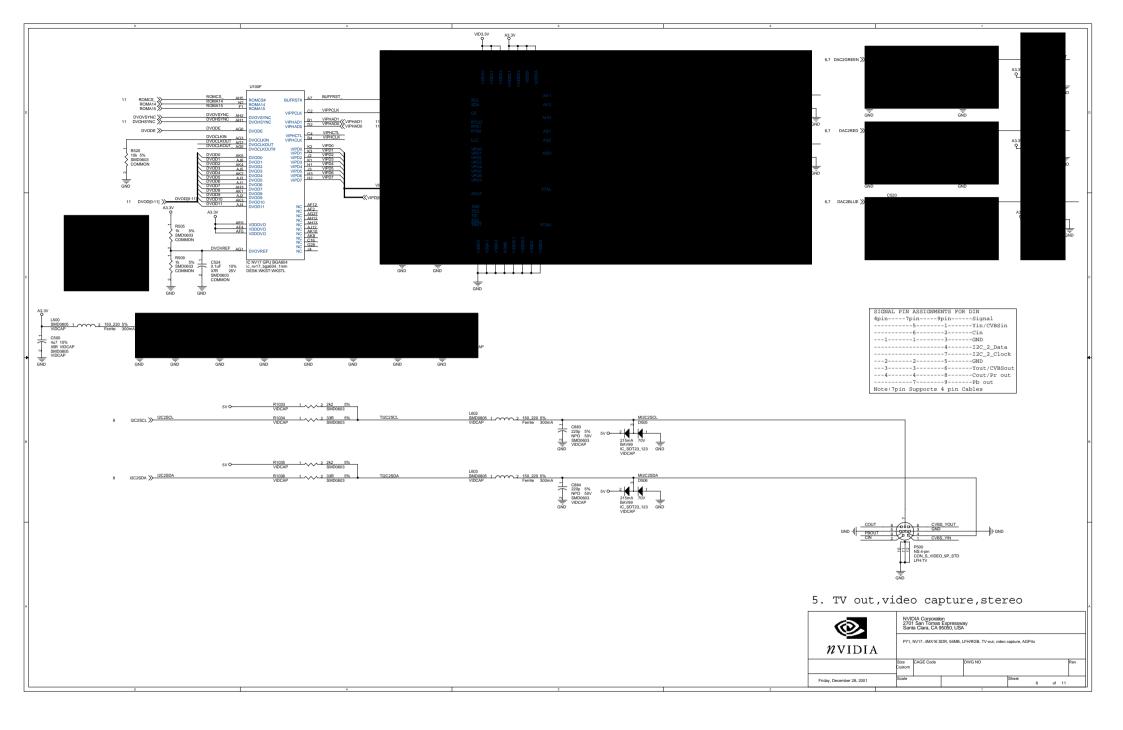
> 140-10071-0000-xxx 602-10071-0000-xxx

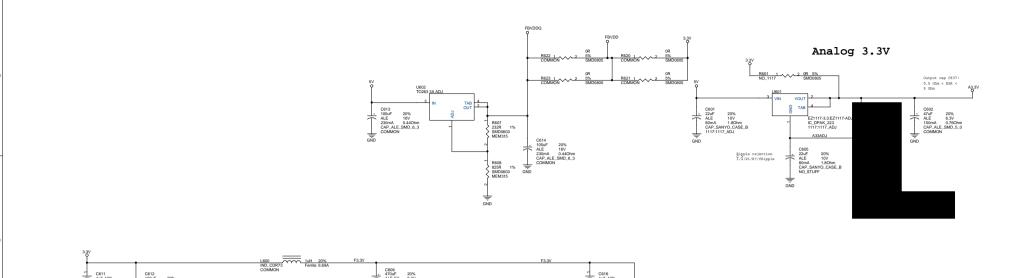


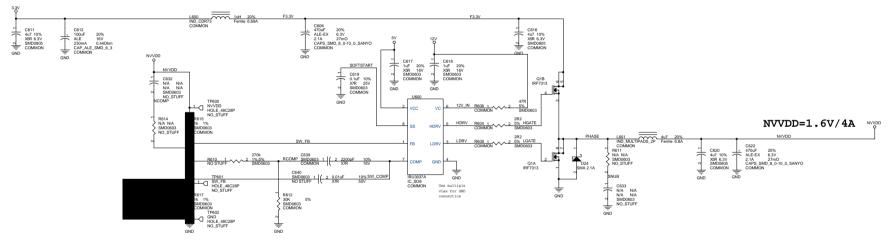






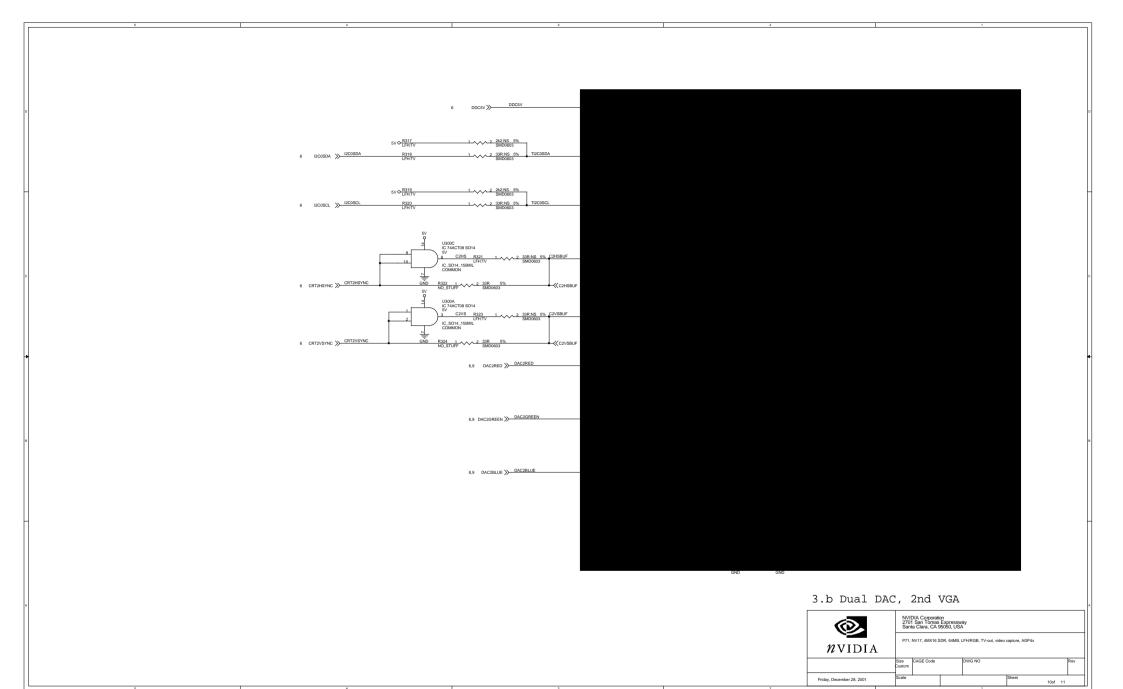






## 6. Power supply

<b>®</b>	NVIDIA Corporation 2701 San Torrast Expressway Santa Clara, CA 95050, USA  P71, NV17, 4MX16 SDR, 64M8, LFHRGB, TV-out, video capture, AGP4x									
nVIDIA										
	Size Custom	CAGE Code		DWG NO					Rev	
Friday, December 28, 2001	Scale		Sheet 9 of 11				11			



DVOD0 not supported R700 1 2 10k 5% SMD0402 R701 1 2 10k 5% COMMON SMD0402 R703 1 2 10k 5% COMMON SMD0402 : system BIOS : adapter BIOS **default** R702 1 2 10k 5% SMD0402 R704 2. 10K:10K:NS:NS:56. DVDD2 R705 5. DVDD2 R705 5. DVDD2 F. R705 5. NS:NS:10K:10K:56. SM SUBSIN 4288H-128 | ABBN 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-2880 | 1-288 R712 1 2 NS:10k 5% DVOD6
LFH:TV SMD0402 R713 1 2 10k:NS5% LFH:TV SMD0402 R714 1 2 10kNS 5% VIPD6

LFH:TV SM00402 R715 1 2 NS:10k5% LFH:TV SMD0402 R718 1 2 10K 5% DVOD7

NO\_STUFF SM00402
R718 1 2 NS-10K 5% DVOD8

LFH:TV SM00402 R717 1 2 10K 5%

COMMON SMD0402

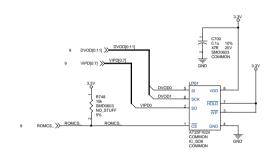
R719 1 2 10K:NS 5%

LFH:TV SMD0402 0: enabled 1: disabled default R722 1 2 10K 5% COMMON SMD0402 R723 1 2 10K 5% NO\_STUFF SMD0402 R724 1 2 10k 5% COMMON SMD0402 R725 1 2 10k 5% SMD0402 : enabled default R726 1 2 10K:10K:10K 5% VIPD4
DESK:WKST:WKSTL SMD0402 R727 1 2 NS:NS:NS 5% DESK-WKST-WKSTI SMD0402 | DESK:WKST:WKSTL SMD0402 | NS:10K:NS 5% VIPD5 | DESK:WKST:WKSTL SMD0402 | DESK:WKST:WKSTL SM00402
R729 1 2 10K:NS:10K5%
DESK:WKST:WKSTL SM00402
R731 1 2 NS:NS:NS 5%
DESK:WKST:WKSTL SM00402
R733 1 2 NS:10K:10K5%
DESK:WKST:WKSTL SM00402
R733 1 2 NS:10K:10K5% PCI\_DEVID\_I DESK:WKS1:WKS1L SMD0402
R730 1 2 10K:10K:10K:05% VIPD3
DESK:WKST:WKSTL SMD0402
R732 1 2 10K:NS:NS 5% DVOHSYNC
DESK:WKST:WKSTL SMD0402 R734 1 2 10k 5% NO STUFF SMD0402 R735 1 2 10k 5% COMMON SMD0402 0: PCI not supported 1: ACD default R737 1 2 10k 5%

NO\_STUFF SMD0402

R739 1 2 10k 5%

NO\_STUFF SMD0402 USER[0]=0: PC default USER[0]=1: MAC not supported R736 1 2 10k 5% COMMON SMD0402 VIPD1 R738 1 2 10k 5% COMMON SMD0402 VIPHAD0 USER\_2 R740 1 2 10k 5% COMMON SMD0402 R741 1 2 10k 5% NO STUFF SMD0402 R742 1 2 10k 5% SMD0402 VIPHAD1 R743 1 2 10k 5% NO\_STUFF SMD0402 USER\_3 [1:0]
00: parallel
01: serial XT25F default
10: serial SST45V not supported
11: serial future not supported R745 1 2 10k 5% SMD0402 DVOD10 R744 1 2 10k 5% NO STUFF SMD0402 R746 1 2 10k 5% COMMON SMD0402 R747 1 2 10k 5% NO\_STUFF SMD0402



DVOVSYNC
DVOHSYNC
DVOHSYNC
ROMA14
ROMA15
ROMA15
ROMA15
DVODE
VIPHAD0
VIPHAD1
VIPHAD1

7. BIOS, Strapping

<b>©</b>	NVIDIA Corporation 2701 San Tomas Expressway Santa Clara, CA 95050, USA									
nvidia	P71, NV17, 4MX16 SDR, 64MB, LFH/RGB, TV-out, video capture, AGP4x									
	Size Custom	CAGE Code		DWG NO					Rev	
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