

## SCHEMATIC DIAGRAMS

PRODUCT NAME Henderson10/10C (VP)

(System 基板)

DPL99060G01  
A5A002688010UNIT NAME FHNSY1

UNIT NO. \_\_\_\_\_

PWA NAME \_\_\_\_\_

PWA NO. \_\_\_\_\_

PWB NAME \_\_\_\_\_

PWB NO. \_\_\_\_\_

PAGE	SH.	FUNCTION	REV	PAGE	SH.	FUNCTION	REV	PAGE	SH.	FUNCTION	REV	PAGE	SH.	FUNCTION	REV
1	---	COVER SHEET	00	26	167	Ibex Peak-M (8)	00	51	231	DOCKING I/F 2	00	76	402	LAN EEPROM(8103EL)	00
2	---	COVER & REV. SHEET	00	27	168	Ibex Peak-M (9)	00	52	251	EXPRESSCARD	00	77	403	LAN I/F&LED(8111DL/8103E	00
3	---	BLOCK DIAGRAM	00	28	169	Ibex Peak-M (10)	00	53	252	EXPRESSCARD I/F	00	78	443	Bluetooth Power	00
4	---	PCB Connection	00	29	170	Ibex Peak-M (11)	00	54	259	WLAN Wimax Power	00	79	444	Bluetooth I/F	00
5	100	CK505 32pin	00	30	171	Ibex Peak-M (12)	00	55	260	PCI-E MINI CARD	00	80	460	USB POWER	00
6	105	rPGA989 (1)	00	31	172	Ibex Peak-M (13)	00	56	261	PCI-E MINI CARD (2G)	00	81	462	USB I/F	00
7	106	rPGA989 (2)	00	32	173	Ibex Peak-M (14)	00	57	267	3G(WWAN) LED	00	82	465	USB CHARGER 3/4(1)	00
8	107	rPGA989 (3)	00	33	174	Ibex Peak-M (15)	00	58	300	FLASH ROM	00	83	466	USB CHARGER 3/4(2)	00
9	108	rPGA989 (4)	00	34	175	IMVP-6.5 POWER OK	00	59	301	MDC I/F	00	84	530	LCD PS	00
10	109	rPGA989 (5)	00	35	177	PCH ITP-XDP 24pin	00	60	310	PC Health PJ	00	85	539	LCD I/F	00
11	110	rPGA989 (6)	00	36	190	SATA HDD I/F	00	61	311	F/T PJ	00	86	540	CRT RGB	00
12	111	rPGA989 (7)	00	37	191	Dedicated SSD I/F	00	62	320	EC/KBC(1)	00	87	541	CRT DDC	00
13	112	rPGA989 (8)	00	38	195	SATA ODD I/F	00	63	321	EC/KBC(2)	00	88	542	CRT H/VSync	00
14	113	rPGA989 (9)	00	39	197	eSATA/USB I/F	00	64	322	EC/KBC(3)	00	89	550	DVI Level Shifter	00
15	115	THERMAL SENSOR	00	40	198	SATA REPEATER	00	65	323	GPIO Expander	00	90	551	DVI Jumper	00
16	117	Proc.ITP-XDP 24pin	00	41	200	PC CARD CONT(1)	00	66	324	KB I/F	00	91	560	Displayport Dongle	00
17	144	DDR3 SO-DIMM A	00	42	201	PC CARD CONT(2)	00	67	325	LED	00	92	569	Displayport I/F	00
18	146	DDR3 SO-DIMM B	00	43	202	PC CARD CONT(3)	00	68	326	WIRELESS SW,LED	00	93	603	ALC268	00
19	160	Ibex Peak-M (1)	00	44	210	PC-Card POWER	00	69	330	TPM CONT	00	94	607	Int-MIC	00
20	161	Ibex Peak-M (2)	00	45	211	PC-CARD I/F	00	70	335	ACCELEROMETER (FRONT)	00	95	615	AN12947AA(1)	00
21	162	Ibex Peak-M (3)	00	46	214	MEDIA BRIDGE I/F	00	71	336	AMP for AXIS	00	96	616	AN12947AA(2)	00
22	163	Ibex Peak-M (4)	00	47	216	Smart Card Reader	00	72	338	FAN I/F	00	97	645	ANALOG POWER	00
23	164	Ibex Peak-M (5)	00	48	217	Smart Card I/F	00	73	340	SUPER I/O	00	98	648	Pass-con	00
24	165	Ibex Peak-M (6)	00	49	220	CARD CONT	00	74	400	Ethernet PHY(Hanksville)	00	99	700	Reduce S3 Power	00
25	166	Ibex Peak-M (7)	00	50	230	DOCKING I/F 1	00	75	401	LAN CONTROLLER(8103EL)	00	100	750	EMI CAP.	00

APPROVED BY	CHECKED BY	DESIGNED BY	TITLE	TOTAL	PAGE NO.	REV.MARK	DRAWING.NO.
[PC設](PC設7) K.Yamamori	[PC設](PC設7) T.Miyairi	[PC設](PC設7) T.Ichimura	FHNSY1	131	001	00	360069769

2009.10.15

17:09

TOSHIBA CORPORATION

## SCHEMATIC DIAGRAMS

PRODUCT NAME \_\_\_\_\_

UNIT NAME \_\_\_\_\_

UNIT NO. \_\_\_\_\_

PWA NAME \_\_\_\_\_

PWA NO. \_\_\_\_\_

PWB NAME \_\_\_\_\_

PWB NO. \_\_\_\_\_

PAGE	SH.	FUNCTION	REV	PAGE	SH.	FUNCTION	REV
101	800	[PS]DC-IN	00	126	953	FHNJK* I/F	00
102	801	[PS]PVT-SW	00	127	954	WebCam I/F	00
103	802	[PS]1st Battery	00	128	955	FHNFS* I/F	00
104	804	[PS]E5V/E3V	00	129	957	FHNSW* I/F	00
105	805	[PS] B*V/P*V	00	130	970	FELICA I/F	00
106	806	[PS]E10V	00	131	990	Accessories	00
107	807	[PS]CURRENT AMP	00	132			
108	808	[PS] CHARGE	00	133			
109	809	[PS]S5V/S3V	00	134			
110	810	[PS]AnalogInput	00	135			
111	811	[PS]PSC(1)	00	136			
112	812	[PS]PSC(2)	00	137			
113	813	[PS]CPUVCC	00	138			
114	815	[PS]1R8-P1V	00	139			
115	818	[PS]LOAD SW2	00	140			
116	819	[PS]PTV	00	141			
117	820	[PS]1R5-B1V,0R75-POV	00	142			
118	821	[PS]1R05-E1V	00	143			
119	822	[PS]RTCVCC	00	144			
120	832	[PS]IGD-PGV	00	145			
121	841	[PS]LAN-PS	00	146			
122	901	EC TEST PAD	00	147			
123	950	FHNSW* I/F	00	148			
124	951	RGB Unit I/F	00	149			
125	952	Serial Unit I/F	00	150			

REV. MARK	CONTENTS	APPROVED BY	REVISED BY	REGISTERED
00	ISSUE(Release for VP)	2009/10/15 [pc部] (pc部7) K.Yamamori	2009/10/15 [pc部] (pc部7) T.Ichimura	

APPROVED BY	CHECKED BY	DESIGNED BY	TITLE	TOTAL	PAGE NO.	REV.MARK	DRAWING.NO.
2009.10.15	17:09	T.Ichimura	FHNSY1		002	00	360069769



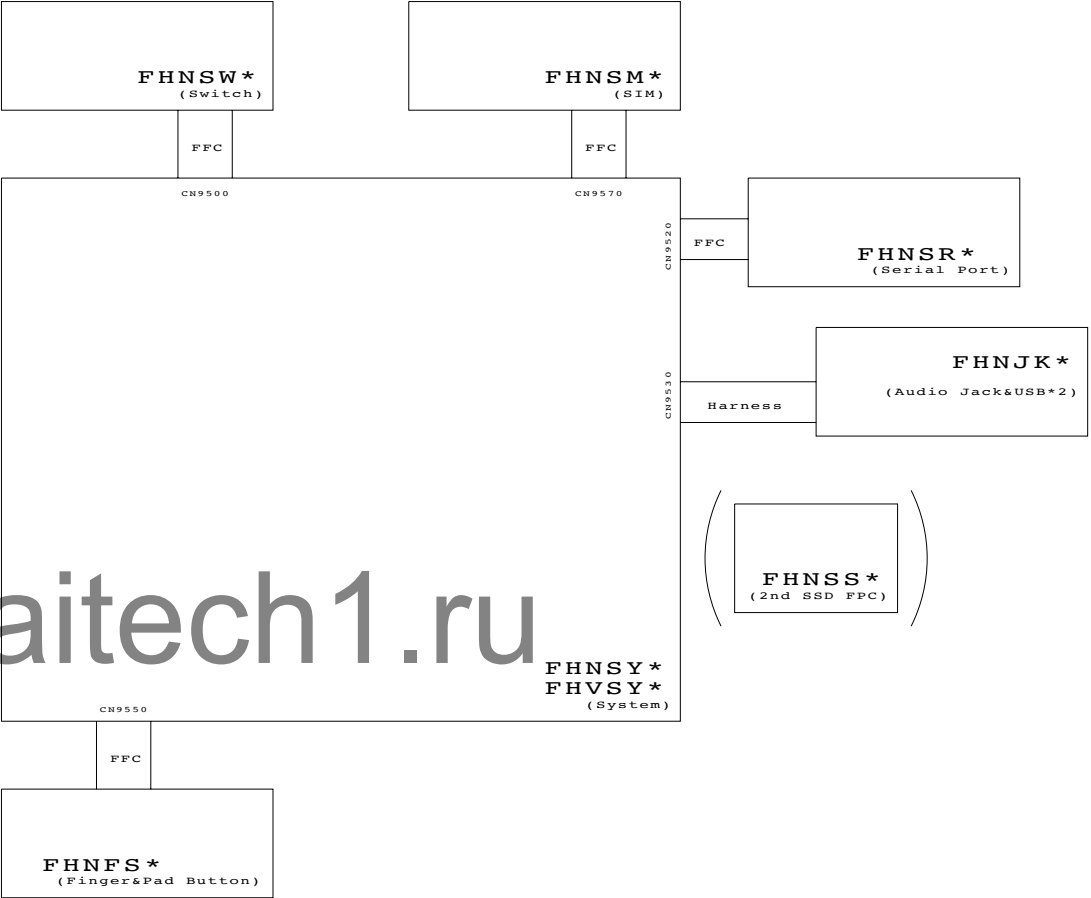
2009.10.15 17:09 G11

Henderson10/10C/10GC基板接続概略図

Main PCB  
FHNSY\*:10/10C System (8ply)  
FHVSY\*:10GC System (8ply)

Sub PCB  
FHNSW\*:Switch  
FHNJK\*:Audio Jack&USB\*2  
FHNFS\*:Fingerprint&Pad Button  
FHNSR\*:Serial Port Unit  
FHNSM\*:SIM

FPC  
FHNSS\*:2nd SSD FPC



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DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura	FHNSY1	PCB Connection	004	004	00	360069769
2009.10.15	17:09	G11	TOSHIBA CORPORATION			

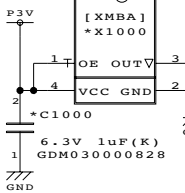


仕向け設定有

Henderson-CS  
Delete W1009, W1010  
■ 2009/7/2Henderson-CS  
IC1000 GDMコードに置き換え  
■ 2009/08/04Henderson-CS  
N.M. R1015, Add Bypass Pattern  
■ 2009/07/15Henderson-CS  
Add Schmitt Inverter related cir.  
■ 2009/07/02Calpella Base  
SATACLKREQ#切り離し、GND固定

必要か実機確認必要

## TXC製発振器

14.31818MHz±50ppm  
7X14380003  
GDM100000362Henderson-CS  
X1000 Size Change:  
5032 → 3225  
■ 2009/07/17Henderson10-CS  
IC1154 GDMコードに置き換え  
■ 2009/08/04Henderson-VP  
C1006, 1007: 15pF → 12pF  
■ 2009/10/106.3V 10uF(K) x2  
GDM03000074816V 100nF(Z)  
GDM030000765 x36.3V 10uF(K)  
GDM03000074816V 100nF(Z)  
GDM030000765 x3Henderson-CS  
1uF Capacitor 1608 → 1005:  
C1000  
■ 2009/07/16

DESIGNED BY

T. Ichimura/L. Yu

2009.10.15

17:09

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TITLE

FHNSY1

FUNCTION

CK505 32pin

SH.NO.

100

PAGE NO.

005

REV.MARK

00

DRAWING.NO.

360069769

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GDM470001566

## CLOCK GENERATOR

[L9LVRS394]

IC1000

CPUT0\_LPRS V

CPUC0\_LPRS V

CLKREQA#

SRCOT\_LPRS V

SRCOC\_LPRS V

LCD\_SST/SRC1T\_LPRS V

LCD\_SSC/SRC1C\_LPRS V

SRC2T\_LPRS/SATAT V

SRC2C\_LPRS/SATAT V

DOT96T\_LPRS V

DOT96C\_LPRS V

USB\_48MHz/FSLA V

SEL\_SATA#/27\_SS V

SEL\_LCD#/27FIX V

CK\_PWRGD/PD#

V\_SCLK

V\_SDATA

X1 SEL\_SE0/RET0\_3X V

X2

VDDCPU\_LV

VDDSRC\_LV

VDDLCD\_LV

VDD48

VDD27

VDDREF

TH\_PAD

GND

GND

GND

GND

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GND

P3V

63mW 10K(J)

GDM010002517

X4

R1004

R1006

R1008

R1010

R1012

R1014

R1016

R1018

R1020

R1022

R1024

R1026

R1028

R1030

R1032

R1034

R1036

R1038

R1040

R1042

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R1078

R1080

R1082

R1084

R1086

R1088

R1090

R1092

R1094

R1096

R1098

R1100

R1102

R1104

R1106

R1108

R1110

R1112

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R1118

R1120

R1122

R1124

R1126

R1128

R1130

R1132

R1134

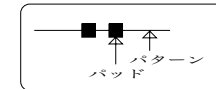
R1136

R1138

R1140

Calpella Base

シリーズジャンパを未実装直結



63mW 0(X)

GDM010001695

W1003

W1004

W1005

W1006

W1007

W1008

W1009

W1010

W1011

W1012

W1013

W1014

W1015

W1016

W1017

W1018

W1019

W1020

W1021

W1022

W1023

W1024

W1025

W1026

W1027

W1028

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W1055

W1056

W1057

W1058

W1059

W1060

W1061

W1062

W1063

W1064

W1065

(int Gfx使わない場合も必要)

X96DOT-P0P

X96DOT-P0N

X48SCR-P3P

X48SCR-P3N

X14PCH-P3P

X14PCH-P3N

X14PCH-P3P

X14PCH-P3N

X14PCH-P3P

X14PCH-P3N

X14PCH-P3P

X14PCH-P3N

X14PCH-P3P

X14PCH-P3N

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X14PCH-P3P

X14PCH-P3N

X14PCH-P3P

X14PCH-P3N

X14PCH-P3P

X14PCH-P3N

X14PCH-P3P

X14PCH-P3N

ICS9LVRS394 Strapping Table:

2009/07/22

FSLA	CPUCCLK
0	133.33
1	100.00

SEL_SATA#	CPUCCLK	SATACLK	SRCCLK
0			
1			

SEL_LCD#	LCD_SSC	SRC1C
0		
1		

SEL_SE0	27SS	27NSS
H	HiZ	25MHz
M	HiZ	24.576MHz
L	HiZ	27NSS
X	27SS	HiZ

Henderson-CS  
24MHz Cir→25MHz Cir  
As backup plan  
■ 2009/07/17Henderson-CS  
X27GPU-P3P→X24FMC-P3P  
W1013→R1014  
■ 2009/07/09Henderson-CS  
Add 48MHz CLK I/F  
■ 2009/7/2Henderson-CS  
X48FMC→X48SCR  
■ 2009/7/7

A

B

C

D

E

F

A

B

C

D

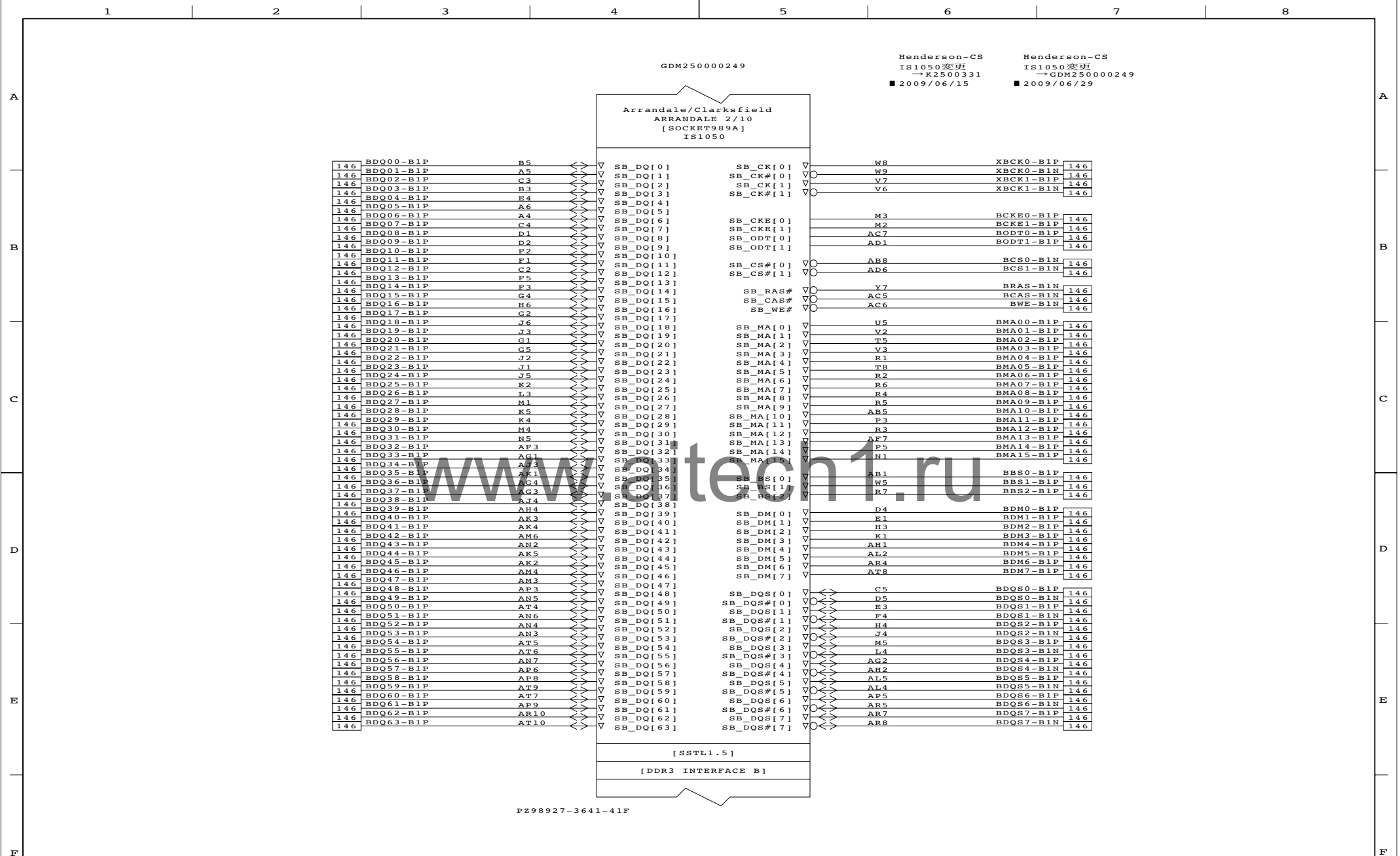
E

F

GDM250000249														Henderson-CS IS1050變更 →K2500331 ■ 2009/06/15														Henderson-CS IS1050變更 →GDM250000249 ■ 2009/06/29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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144	ADQ00-B1P	A10	↔	↔	↔	SA_DQ[0]	SA_CK[0]	↔	↔	AA6	XACK0-B1P	144																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

■ REF: Calpella Platform Base. FCLBS0

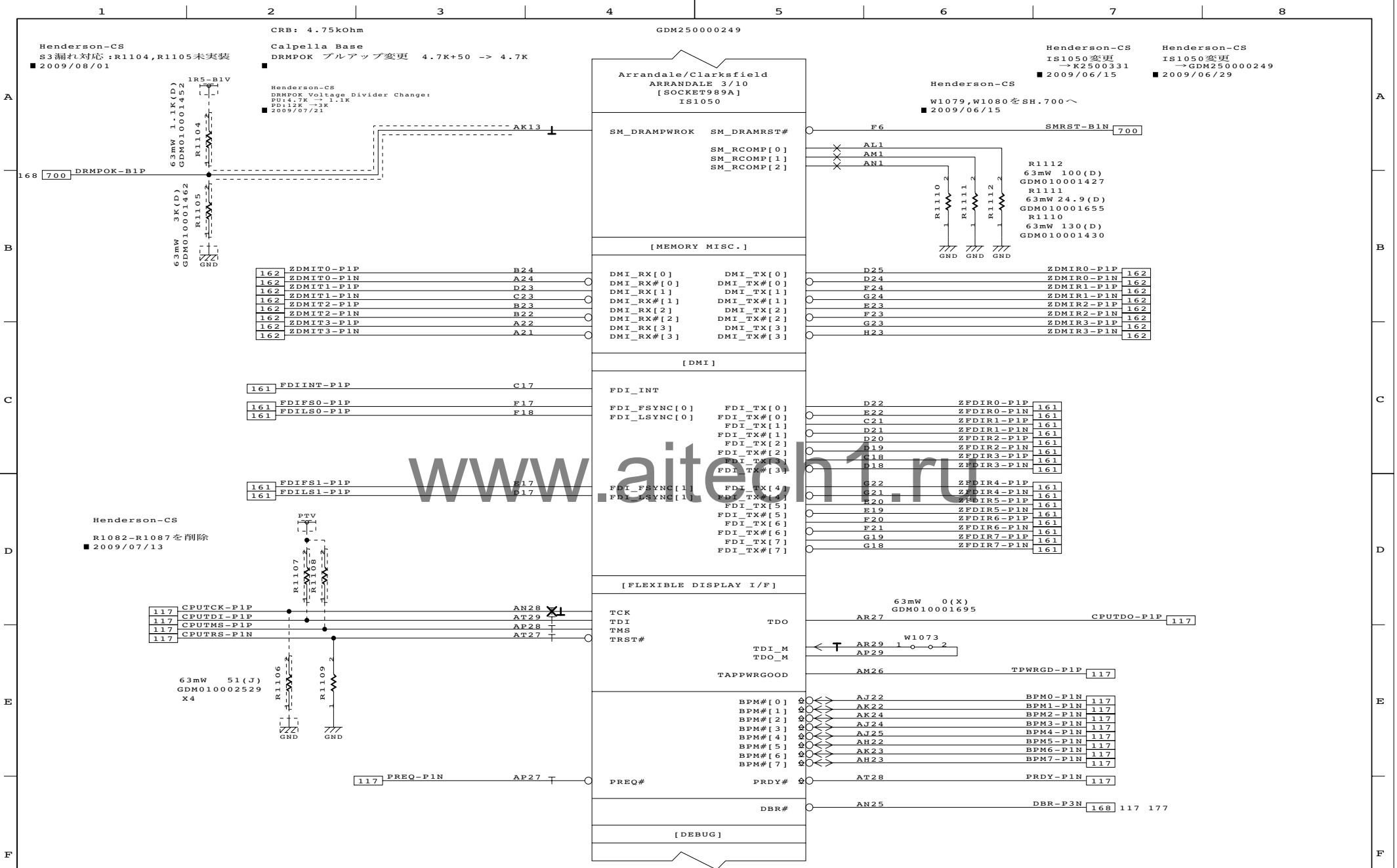
DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura	FHNSY1	rPGA989 (1)	105	006	00	360069769
2009.10.15	17:09	G11	TOSHIBA CORPORATION			



■ REF: Calpella Platform Base. FCLBS0

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura	FHNSY1	rPGA989 (2)	106	007	00	360069769
2009.10.15	17:09	G11				

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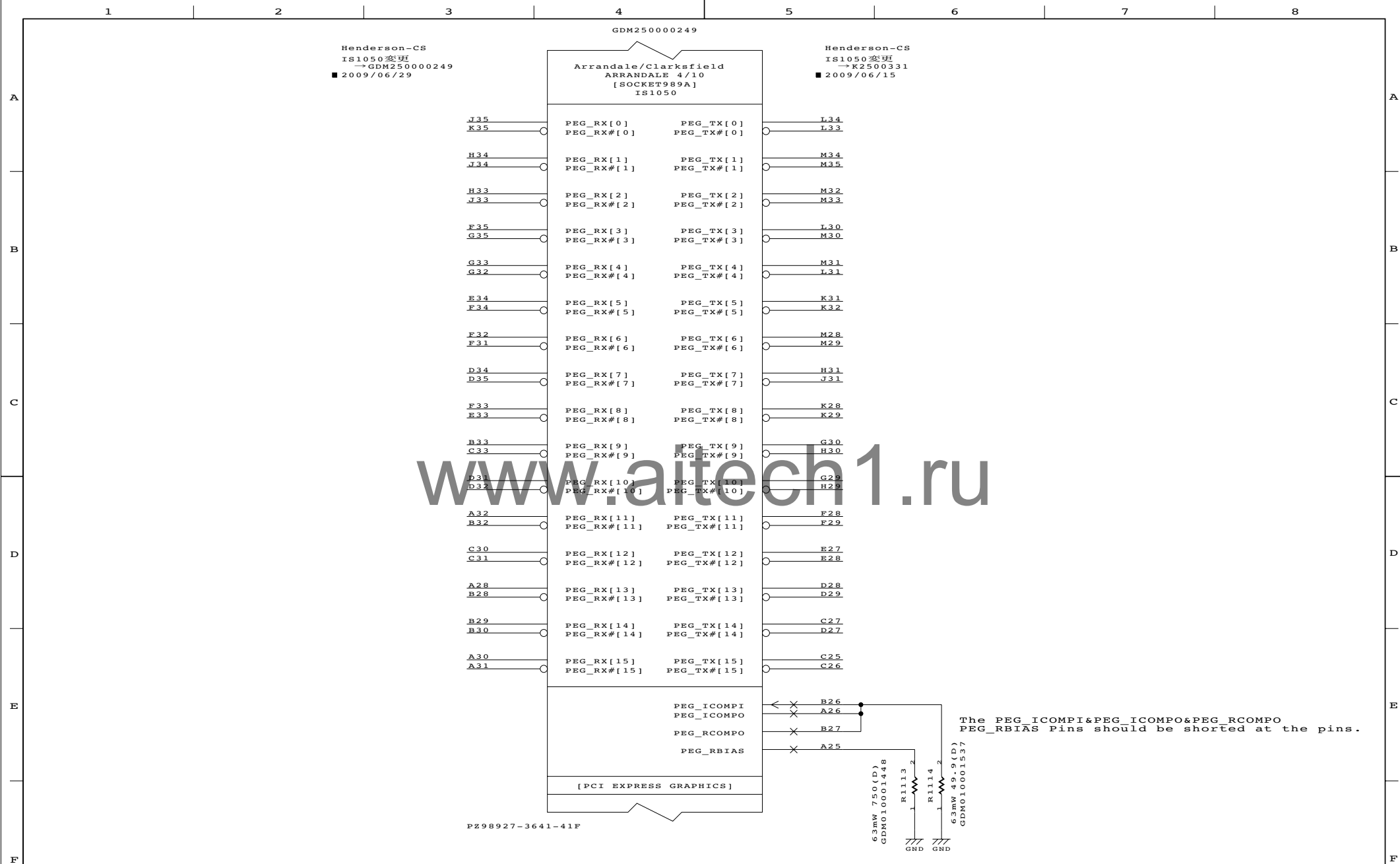
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PZ98927-3641-41F

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Naruse/T.Ichimura	FHNSY1	rPGA989 (3)	107	008	00	360069769

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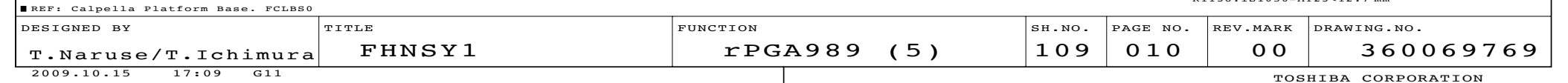


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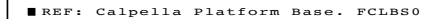
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T.Naruse	FHNSY1	rPGA989 (4)	108	009	00	360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION



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TOSHIBA CORPORATION

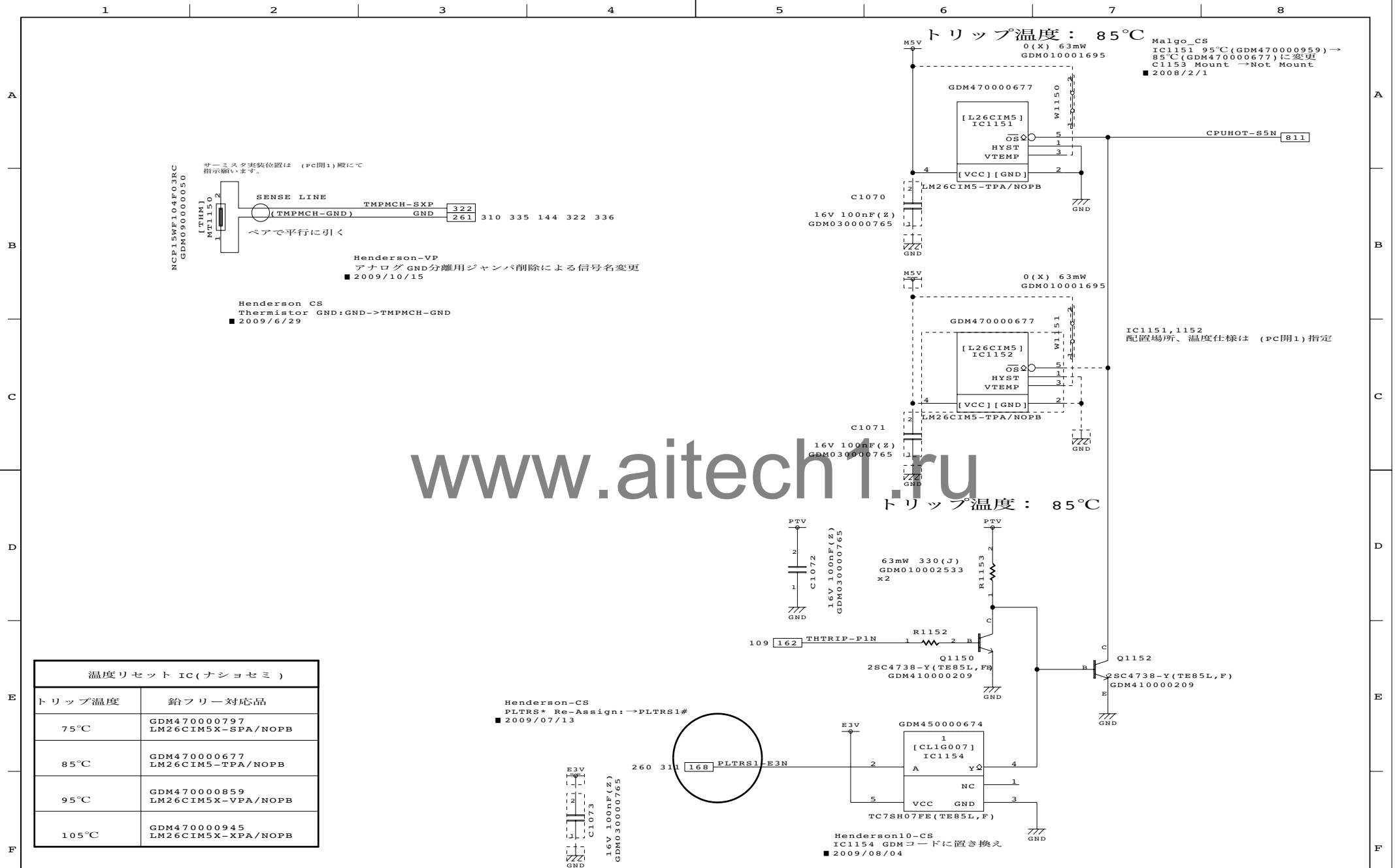




TOSHIBA CORPORATION



TOSHIBA CORPORATION



DESIGNED BY

T. Ichimura

TITLE

FHNSY1

FUNCTION

THERMAL SENSOR

SH.NO.

115

PAGE NO.

015

REV.MARK

00

DRAWING.NO.

360069769

2009.10.15 17:09

TOSHIBA CORPORATION

TP:CN1170の近くに配置

107	BPM0-F1N	DP1200
107	BPM1-F1N	DP1201
107	BPM2-F1N	DP1202
107	BPM3-F1N	DP1203

Calpella SFF TS  
60pin→24pin不足信号に DP追加。  
■ 2009/5/18

107	BPM4-F1N	DP1206
107	BPM5-F1N	DP1207
107	BPM6-F1N	DP1208
107	BPM7-F1N	DP1209
168	SMBDT0-P3P	DP1210
168	SMBCK0-P3P	DP1211

Henderson-CS  
DP1206-1209をDCK55Fに変更  
■ 2009/08/03

Calpella SFF TS  
DBR-P3N:PUをN.Mに。  
■ 2009/6/1

Lillehammer Temp  
XDP 60pin → XDP-SFF 24pin  
■ 2009/3/4

Henderson CS  
Delete CFG[0:17] I/F  
■ 2009/7/2

Henderson CS  
Delete W1172-W1175,W1178-W1179  
Change to direct connection  
■ 2009/07/15

Henderson-CS  
CN1170:G-CODE化  
■ 2009/08/04

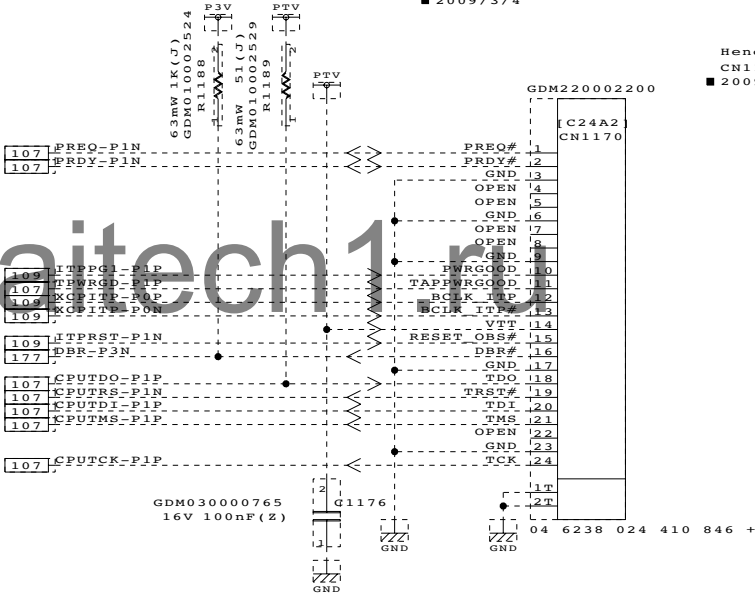
Henderson CS  
N.M.CN1170,C1176,R1189  
■ 2009/6/27

Henderson CS  
CPU-PTV->PTV  
■ 2009/6/27

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Lilleham Temp  
DBR-E3N→DBR-P3N  
■ 2009/3/24

107 168

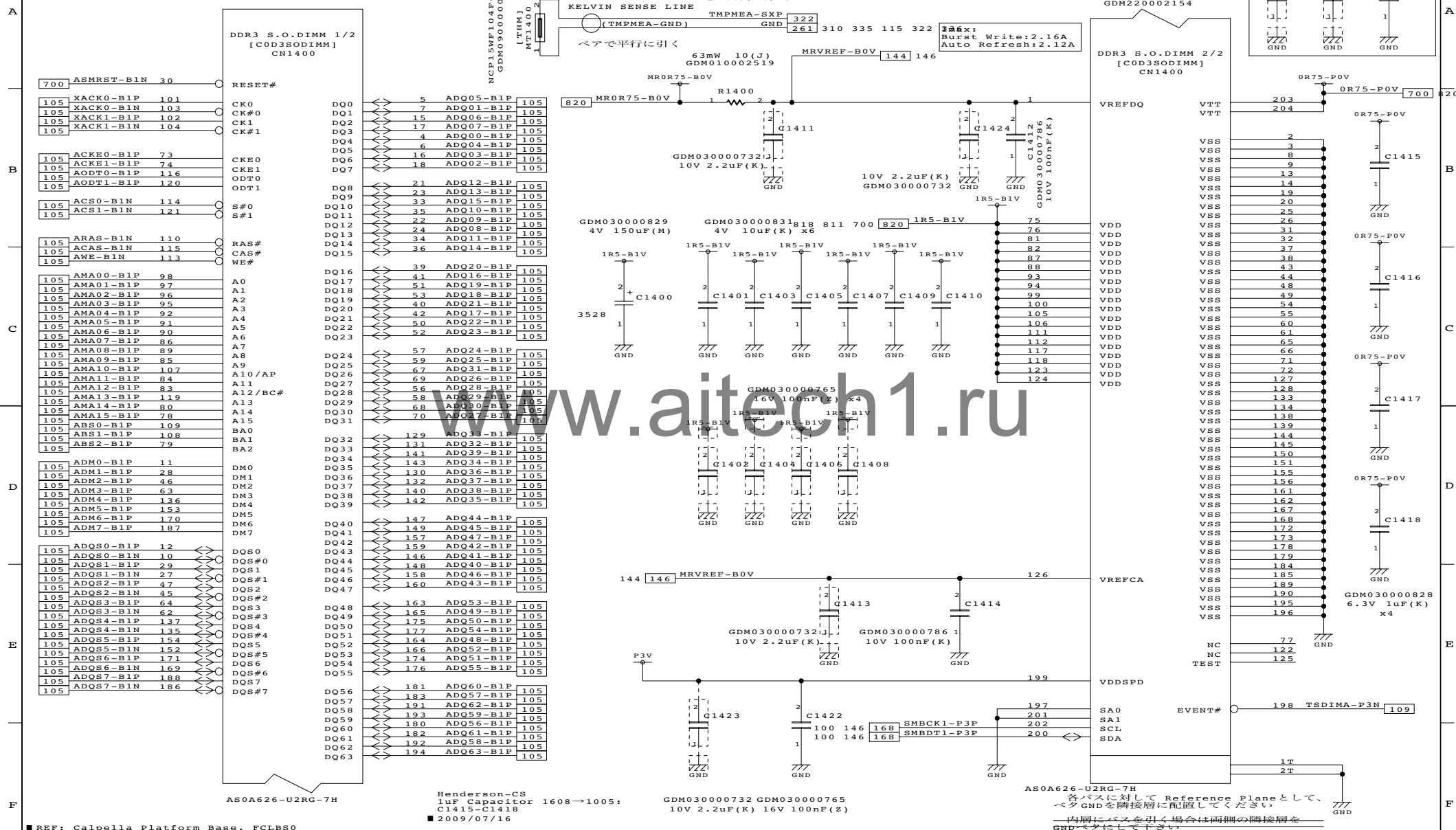


■ REF: Calpella SFF TS. FCLST0

DESIGNED BY <b>Ling.Yu</b>	TITLE <b>FHNSY1</b>	FUNCTION <b>Proc.ITP-XDP 24pin</b>	SH.NO. <b>117</b>	PAGE NO. <b>016</b>	REV.MARK <b>00</b>	DRAWING.NO. <b>360069769</b>
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2009.10.15 17:09 G11

## 5.2 Height Reverse

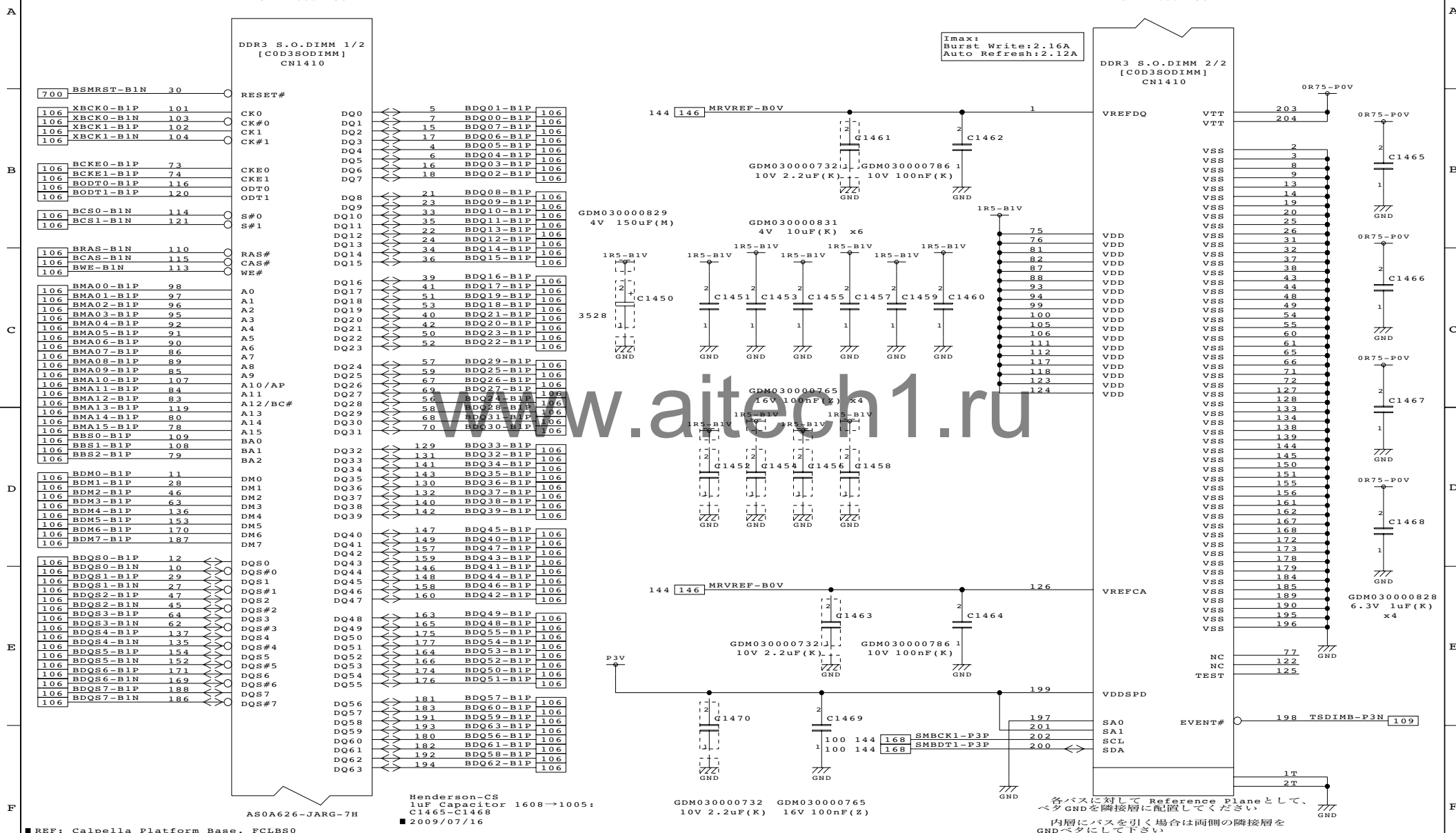


Henderson10-CS  
Delete MT1410  
2009/07/21

```
Henderson10-CS
Delete W1410,W1413,W1414(MRVREF-B0V)
(Not support Clarksfield)
■ 2009/06/29
```

AS0A626-JARG-7H

GDM220002153



REF: Calpella Platform Base. FCLBS0

Henderson-CS  
1uF Capacitor 1608→1005:  
C1465-C1468  
■ 2009/07/16

GDM030000732	GDM030000765
10V 2.2uF(K)	16V 100nF(Z)

各バスに対して Reference Planeとして、ベタGNDを隣接層に配置してください

内層にバスを引く場合は両側の隣接層をGNDベタにして下さい

DESIGNED BY T. Ichimura	TITLE FHNSY1	FUNCTION DDR3 SO-DIMM B	SH.NO. 146	PAGE NO. 018	REV.MARK 00	DRAWING.NO. 360069769
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仕向け設定有

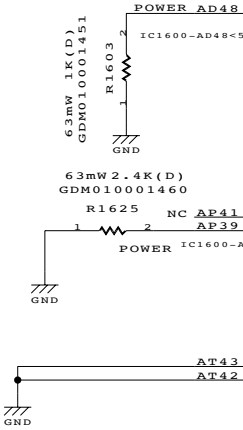
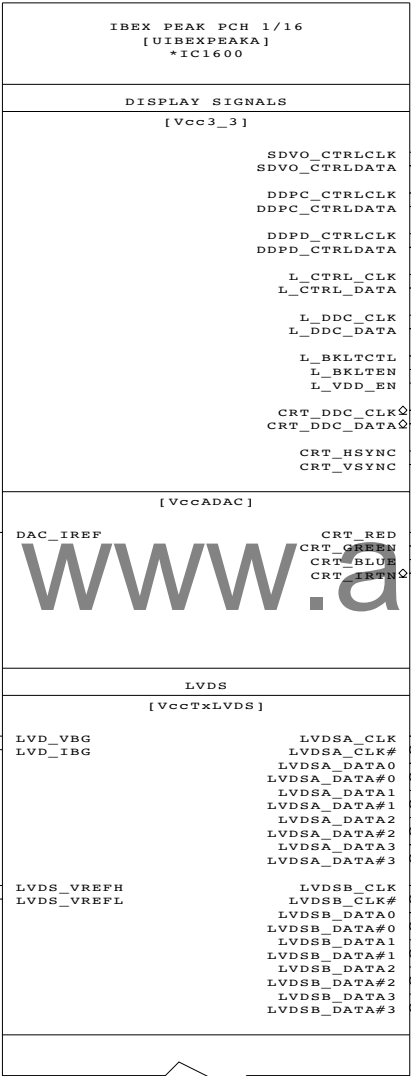
QM57-QS:GDM460002391  
QM57-VP:GDM460002418  
HM55-QS:GDM460002387  
HM55-VP:GDM460002417

Henderson-VP  
IC1600:→VP-CODE化  
■ 2009/10/15

Henderson-CS  
IC1600:→G-CODE化  
■ 2009/08/04

GDM460002418

PCH	用途	接続先	備考	PU
SDVO_CTRL	DVI DDC	DigitalPort B	DVI	Sh.550
DDPC_CTRL	Displayport DDC	DigitalPort C	Displayport	Sh.560
DDPD_CTRL	Not Used	DigitalPort D		N/A
L_CTRL	Not Used	N/A		N/A
L_DDC	LCD Detect	P3V		Sh.160
CRT_DDC	CRT DDC	CRT		Sh.541



Docker	
Yes	No
GDM010001429 120ohm	GDM010001672 75ohm

■ REF: Calpella Platform Base. FCLBS0

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Naruse	FHNSY1	Ibex Peak-M (1) 160	019	00	360069769	

2009.10.15 17:09 G11

仕向け設定有

Docker

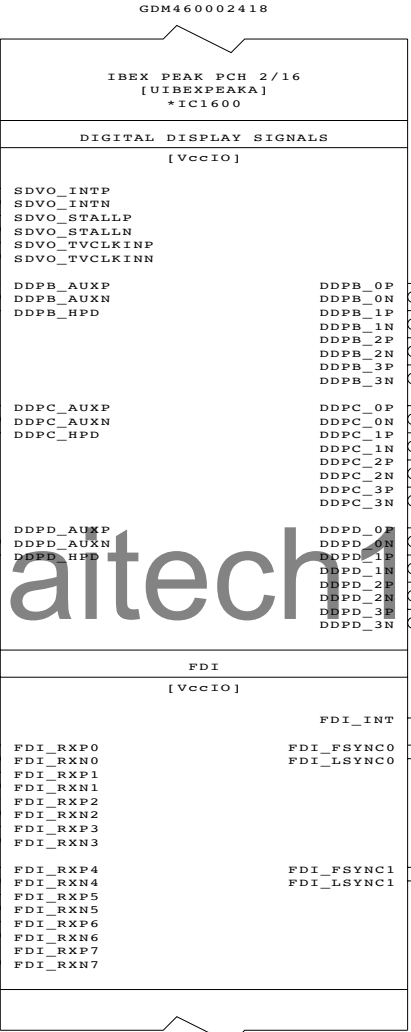
	Yes	No
C1600-C1607 R1798	Mount NotMount	NotMount Mount

Mini-DP

	Yes	No
C1608-C1615 W1611	Mount Mount	NotMount Mount

Henderson-VP  
HPDにプルダウン抵抗追加。  
■ 2009/09/24

BH45  
BF45  
BG48  
BJ48  
BG46  
BJ46  
BJ44  
BG44  
AU38



Digital Port

HDMI

DDPB_0	TMDSB_DATA2
DDPB_1	TMDSB_DATA1
DDPB_2	TMDSB_DATA0
DDPB_3	TMDSB_CLK

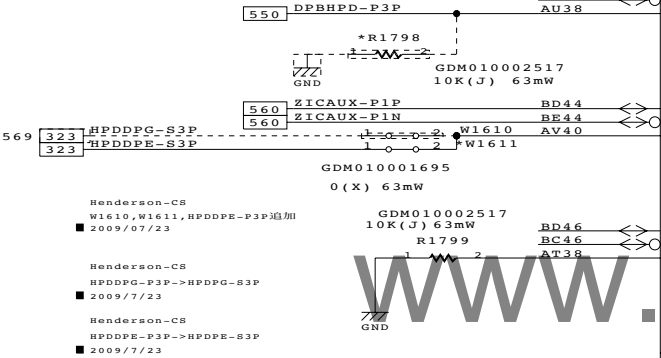
Digital Port

Displayport

DDPC_0	DDPC_0
DDPC_1	DDPC_1
DDPC_2	DDPC_2
DDPC_3	DDPC_3

DG ver1.6より

10V 100nF(K)  
GDM030000786



DDPB_0P	BC42	N	*C1600 ZIDPB2-P1P	550
DDPB_0N	BD42	N	*C1601 ZIDPB2-P1N	550
DDPB_1P	BG42	N	*C1602 ZIDPB1-P1P	550
DDPB_1N	BJ42	N	*C1603 ZIDPB1-P1N	550
DDPB_2P	BA40	N	*C1604 ZIDPB0-P1P	550
DDPB_2N	BB40	N	*C1605 ZIDPB0-P1N	550
DDPB_3P	BA38	N	*C1606 XIDPBC-P1P	550
DDPB_3N	AW38	N	*C1607 XIDPBC-P1N	550
DDPC_0P	BD40	N	*C1608 ZDPTX0-P1P	569
DDPC_0N	BE40	N	*C1609 ZDPTX0-P1N	569
DDPC_1P	BH41	N	*C1610 ZDPTX1-P1P	569
DDPC_1N	BF41	N	*C1611 ZDPTX1-P1N	569
DDPC_2P	BC38	N	*C1612 ZDPTX2-P1P	569
DDPC_2N	BD38	N	*C1613 ZDPTX2-P1N	569
DDPC_3P	BA36	N	*C1614 ZDPTX3-P1P	569
DDPC_3N	BB36	N	*C1615 ZDPTX3-P1N	569
DDPD_0P	BG40	N		
DDPD_0N	BJ40	N		
DDPD_1P	BG38	N		
DDPD_1N	BJ38	N		
DDPD_2P	BH37	N		
DDPD_2N	BF37	N		
DDPD_3P	BD36	N		
DDPD_3N	BE36	N		

DVI

Displayport

BD82QM57 SLGZQ

■ REF: Calpella Platform Base. FCLBS0

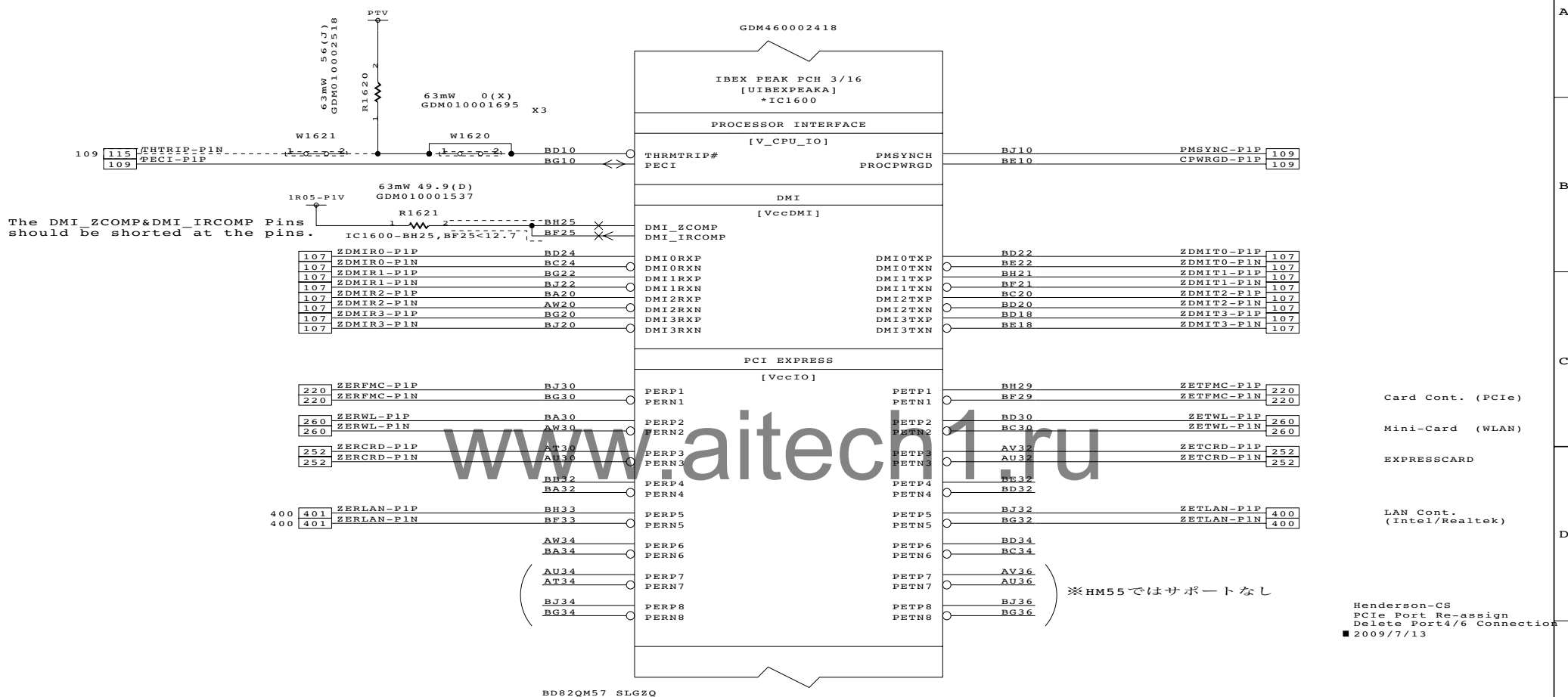
DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Naruse	FHNSY1	Ibex Peak-M (2)	161	020	00	360069769

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TOSHIBA CORPORATION



仕向け設定有



REF: Calpella Platform Base. FCLBS0

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura/L.Yu	FHNSY1	Ibex Peak-M (3)	162	021	00	360069769

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TOSHIBA CORPORATION

仕向け設定有

NAND	w/ Braidwood	w/o Braidwood
R1637	MOUNT	NOT MOUNT

A

A

B

B

C

C

D

D

E

E

F

F

Henderson-CS  
DC NAND I/F Change to N.C.  
■ 2009/6/27

(NVDDQ00-P1P)	N.C.	AP7	<>	NV_DQ0/NV_IO0	NV_RB#
(NVDDQ01-P1P)	N.C.	AP6	<>	NV_DQ1/NV_IO1	
(NVDDQ02-P1P)	N.C.	AT6	<>	NV_DQ2/NV_IO2	NV_CLE
(NVDDQ03-P1P)	N.C.	AT9	<>	NV_DQ3/NV_IO3	NV_ALE
(NVDDQ04-P1P)	N.C.	BB1	<>	NV_DQ4/NV_IO4	NV_CE#0
(NVDDQ05-P1P)	N.C.	AV6	<>	NV_DQ5/NV_IO5	BD1
(NVDDQ06-P1P)	N.C.	BB3	<>	NV_DQ6/NV_IO6	AP15
(NVDDQ07-P1P)	N.C.	BA4	<>	NV_DQ7/NV_IO7	NV_CE#2
					NV_CE#3
(NVDDQ08-P1P)	N.C.	BE4	<>	NV_DQ8/NV_IO8	NV_WR#0_R#
(NVDDQ09-P1P)	N.C.	BB6	<>	NV_DQ9/NV_IO9	NV_WR#1_R#
(NVDDQ10-P1P)	N.C.	BD6	<>	NV_DQ10/NV_IO10	NV_WE#_CK0
(NVDDQ11-P1P)	N.C.	BB7	<>	NV_DQ11/NV_IO11	NV_WE#_CK1
(NVDDQ12-P1P)	N.C.	BC8	<>	NV_DQ12/NV_IO12	
(NVDDQ13-P1P)	N.C.	BJ8	<>	NV_DQ13/NV_IO13	NV_DQS0
(NVDDQ14-P1P)	N.C.	BJ6	<>	NV_DQ14/NV_IO14	NV_DQS1
(NVDDQ15-P1P)	N.C.	BG6	<>	NV_DQ15/NV_IO15	NV_RCOMP

GDM460002418

IBEX PEAK PCH 4/16  
[UIBEXPEAKA]  
\*IC1600

DC NAND

[VccPNAND]

SERIAL PERIPHERAL INTERFACE

[VccME3\_3]

SERIAL ATA INTERFACE

[VccIO]

16V 10nF(K)  
GDM030000763 X12

190	ZSTRHD-P1P	N	C1630	AK6	SATA0RXP	SATA0TXP	AK9		C1642	ZSTTHD-P1P	190
190	ZSTRHD-P1N	N	C1631	AK7	SATA0RXN	SATA0TXN	AK11		C1643	ZSTTHD-P1N	190
195	ZSTROD-P1P	N	C1632	AH5	SATA1RXP	SATA1TXP	AH8		C1644	ZSTTOD-P1P	195
195	ZSTROD-P1N	N	C1633	AH6	SATA1RXN	SATA1TXN	AH9		C1645	ZSTTOD-P1N	195
				AF9	SATA2RXP	SATA2TXP	AF6				
				AF11	SATA2RXN	SATA2TXN	AF7				
				AH1	SATA3RXP	SATA3TXP	AF1				
				AH3	SATA3RXN	SATA3TXN	AF3				
191	ZSTRSD-P1P	N	*C1638	AD8	SATA4RXP	SATA4TXP	AD5		*C1650	ZSTTSD-P1P	191
191	ZSTRSD-P1N	N	*C1639	AD9	SATA4RXN	SATA4TXN	AD6		*C1651	ZSTTSD-P1N	191
198	ZSTRP5-P1P	N	*C1640	AD1	SATA5RXP	SATA5TXP	AB1		*C1652	ZSTTP5-P1P	198
198	ZSTRP5-P1N	N	*C1641	AD3	SATA5RXN	SATA5TXN	AB3		*C1653	ZSTTP5-P1N	198

Henderson-CS  
ZSTRES-P1P → ZSTRP5-P1P  
ZSTRES-P1N → ZSTRP5-P1N  
■ 2009/07/08

BD82QM57 SLGZQ

1R8-P1V

63mW 1K(J)  
GDM010002524

Henderson-CS  
Delete R1635  
(No support ATT)  
■ 2009/07/21

Henderson-CS  
DC NAND I/F Change to N.C.  
■ 2009/6/27

Henderson-CS  
Change R1637 to N.M.  
■ 2009/6/27

※Gコード仮置き  
R1637  
32.4ohm\_1%  
Henderson-CS  
Add Backup 2nd SPI I/F  
Delete Backup 2nd SPI I/F  
■ 2009/6/27  
■ 2009/07/21

Henderson-VP  
SPI:0Ω→33Ω  
■ 2009/10/15

GDM010002527 x3	63mW 33(J)	BA2	1	2	R1635	SPICK0-E3P	300
		AY1	1	2	R1639	SPIM00-E3P	300
		AY3	1	2	R1642	SPICS0-E3N	300

AC COUPLING CAPS  
10nF ±15%  
X8  
GDM030000763

	N	C1642	ZSTTHD-P1P	190
	N	C1643	ZSTTHD-P1N	190
	N	C1644	ZSTTOD-P1P	195
	N	C1645	ZSTTOD-P1N	195
	N	*C1650	ZSTTSD-P1P	191
	N	*C1651	ZSTTSD-P1N	191
	N	*C1652	ZSTTP5-P1P	198
	N	*C1653	ZSTTP5-P1N	198

1st HDD

ODD

Dedicated SSD

eSATA

IC1600-AF15, AF16<12.7  
1R05-P1V

Henderson-CS  
Change SATA Port Assign  
Mount AC.Cap for SATA Port4/5  
■ 2009/6/27

63mW 37.4(D)  
GDM010001540

Henderson-CS  
ZSTTES-P1P → ZSTTP5-P1P  
ZSTTES-P1N → ZSTTP5-P1N  
■ 2009/07/08

■ REF: Calpella Platform Base. FCLBS0

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura/L.Yu	FHNSY1	Ibex Peak-M (4)	163	022	00	360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION



## 仕向け設定有

Henderson-CS  
Delete RM1650  
Add R1650,R1651,R1654,R1657  
■ 2009/7/6

Henderson-CS  
Re-assign RM1681 Pin Assignment  
(layout request)  
■ 2009/07/17

Henderson-CS  
Re-assign RM1653 Pin Assignment  
(layout request)  
■ 2009/07/23

GDM010001729  
8.2K(J) 31mWx3

63mW 8.2K(J) X3  
GDM010002539

GDM010002539  
8.2K(J) 63mW  
x3

200 FRAME-P3N  
200 IRDY-P3N  
200 DEVSEL-P3N  
200 TRDY-P3N  
200 STOP-P3N

200 PREQ0-P3N

Henderson-CS  
Delete PERR/SERR  
PU Pin E50,E44  
■ 2009/07/15

Henderson-CS  
Delete PLOCK  
PU Pin D49  
■ 2009/07/09

Henderson-CS  
Delete R1709,R1710  
R1711:PU → PD  
■ 2009/7/6

GPI:PCB Level Judge

GPI:DisplayPort Detect  
GPI:Debug PCB Detect

165 VPMDL-P3N  
200 PIRQF-P3N  
200 DPMDL-P3N  
569 LPCDBG-P3N  
311

GDM460002418

IBEX PEAK PCH 6/16  
[UIBEXPEAKA]  
\*IC1600

PCI BUS INTERFACE

[VccSus3\_3]

PCIRST#

[Vcc3\_3]

AD0V

AD1V

AD2V

AD3V

AD4V

AD5V

AD6V

AD7V

AD8V

AD9V

AD10V

AD11V

AD12V

AD13V

AD14V

AD15V

AD16V

AD17V

AD18V

AD19V

AD20V

AD21V

AD22V

AD23V

AD24V

AD25V

AD26V

AD27V

AD28V

AD29V

AD30V

AD31V

C/BE0#V

C/BE1#V

C/BE2#V

C/BE3#V

PARV

GNT0#

GNT1#/GPIO51

GNT2#/GPIO53

GNT3#/GPIO55

INTERRUPT INTERFACE

[Vcc3\_3]

QPIRQA#

QPIRQB#

QPIROC#

QPIROD#

QGPIO2/PIRQE#

QGPIO3/PIROF#

QGPIO4/PIROG#

QGPIO5/PIROH#

GDM010002527  
63mW 33(J)

PCIRSO-E3N

PCIRS1-E3N

AD00-P3P

AD01-P3P

AD02-P3P

AD03-P3P

AD04-P3P

AD05-P3P

AD06-P3P

AD07-P3P

AD08-P3P

AD09-P3P

AD10-P3P

AD11-P3P

AD12-P3P

AD13-P3P

AD14-P3P

AD15-P3P

AD16-P3P

AD17-P3P

AD18-P3P

AD19-P3P

AD20-P3P

AD21-P3P

AD22-P3P

AD23-P3P

AD24-P3P

AD25-P3P

AD26-P3P

AD27-P3P

AD28-P3P

AD29-P3P

AD30-P3P

AD31-P3P

CBE0-P3N

CBE1-P3N

CBE2-P3N

CBE3-P3N

PAR-P3P

PGNT0-P3N

DP1650

DP1651

DCK50F25Kx2

Functional Strap

GNT1#/GPIO51	GNT0#	Boot BIOS Destination Selection
0	0	LPC
1	0	PCI
1	1	SPI

DESIGNED BY

T.Ichimura/L.Yu

2009.10.15 17:09 G11

TITLE

FHNSY1

FUNCTION

Ibex Peak-M (6)

SH.NO.

165

PAGE NO.

024

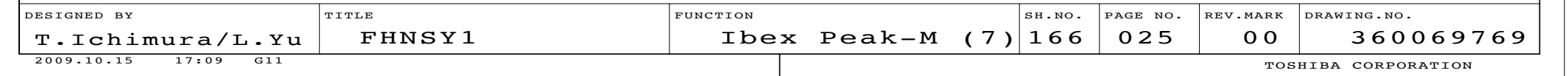
REV.MARK

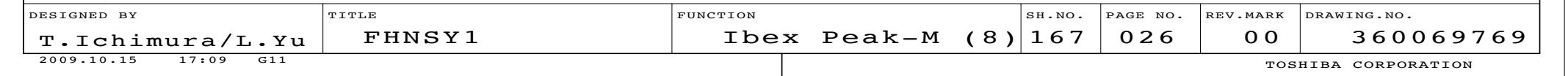
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DRAWING.NO.

360069769

TOSHIBA CORPORATION





## 仕向け設定有

ITP使用時: R1788実装

Calpella Base  
SYS\_RESET#のプルアップを E3VからP3Vに変更Henderson-CS  
GPIO24→DP1681 → FMCST#  
FMCST# → AMTMDL  
■ 2009/7/7

GPI:AMT Detection

167 AMTMDL-E3N  
321 ACPRES-S3P63mW 0(X)  
GDM010001695 x5107 117 177 DBR-P3N  
321 PWRBTN-S3N  
167 GPSTS-E3N  
260 252 401 PEWAKE-E3N  
168 175 PWROK-E3P  
321 MEPWOK-S3P  
322 LANPOK-S3P63mW 1K(J)  
GDM010002524177 ITPPG2-E3P  
168 175 PWROK-E3P  
321 RSMRST-S3N63mW 10K(J)  
GDM010002517

AMT	w/ AMT	w/o AMT
W1687	MOUNT	NOT MOUNT
R1699	NOT MOUNT	MOUNT

LAN	Hanksville	Ext.LAN Cont.
W1681	MOUNT	NOT MOUNT
R1684 R1712	NOT MOUNT	MOUNT

■ REF: Calpella Platform Base. FCLBS0

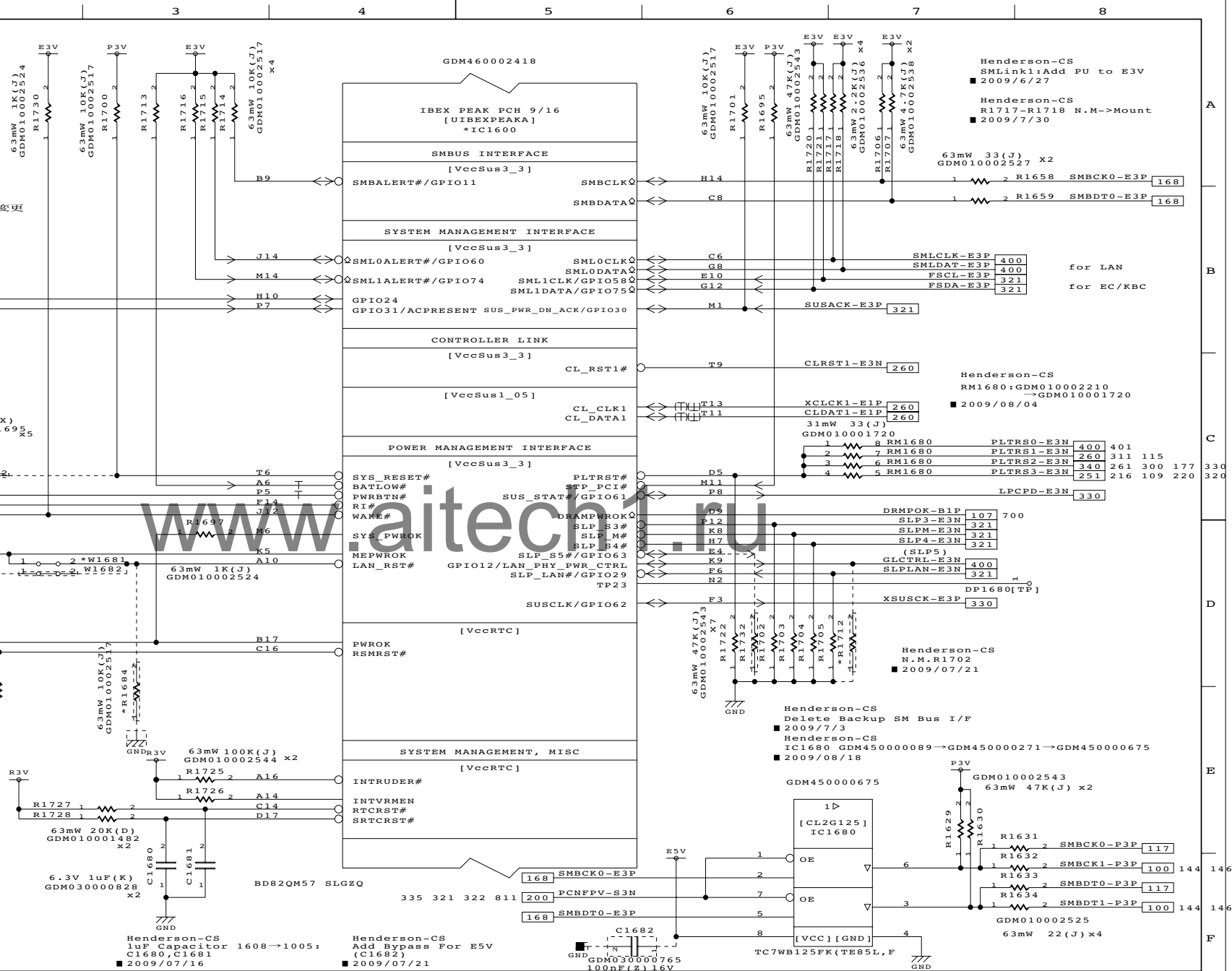
Henderson-CS  
1uF Capacitor 1608→1005:  
C1680, C1681  
■ 2009/07/16Henderson-CS  
Add Bypass For E5V  
(C1682)  
■ 2009/07/21DESIGNED BY  
T. Ichimura/L.Yu

2009.10.15 17:09 G11

TITLE  
FHNSY1FUNCTION  
Ibex Peak-M (9) 168SH.NO.  
027PAGE NO.  
00REV.MARK  
360069769

DRAWING.NO.

TOSHIBA CORPORATION



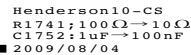
TOSHIBA CORPORATION







SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
171	030	00	360069769

TOSHIBA CORPORATION



TOSHIBA CORPORATION

GDM460002418

IBEX PEAK PCH 16/16  
[UIBEXPEAKA]  
\*IC1600

GROUND

TP. NC. NCTF

AW14						BA22	DP1700
AW18	VSS			TP1		AW22	DP1701
AW32	VSS			TP2		BB22	DP1702
AW36	VSS			TP3		AY45	DP1703
AW40	VSS			TP4		AY46	DP1704
AW52	VSS			TP5		AV43	DP1705
AY7	VSS			TP6		AV45	DP1706
AY11	VSS			TP7		AF13	DP1707
AY43	VSS			TP8		M18	DP1708
AY47	VSS			TP9		N18	DP1709
BA12	VSS			TP10		AJ24	DP1710
BA42	VSS			TP11		AK41	DP1711
BB5	VSS			TP12		M32	DP1712
BB10	VSS			TP13		N32	DP1713
BB12	VSS			TP14		M30	DP1714
BB16	VSS			TP15		N30	DP1715
BB20	VSS			TP16		H12	DP1716
BB24	VSS			TP17		AA23	DP1717
BB30	VSS			TP18			DP1718
BB34	VSS			TP19			[TP]
BB38	VSS						
BB42	VSS						
BB44	VSS						
BB49	VSS						
BC2	VSS			NC		AB45	
BC10	VSS			NC		AB18	
BC14	VSS			NC		AB42	
BC18	VSS			NC		AB41	
BC22	VSS			NC		T39	
BC32	VSS						
BC36	VSS						
BC40	VSS			VSS_NCTF		A4	
BC44	VSS			VSS_NCTF		A5	
BC52	VSS			VSS_NCTF		B2	
BD5	VSS			VSS_NCTF		B4	
BD48	VSS			VSS_NCTF		D1	
BD49	VSS			VSS_NCTF		D2	
BE6	VSS			VSS_NCTF		E1	
BE8	VSS						
BE12	VSS						
BE16	VSS						
BE20	VSS			VSS_NCTF		A49	
BE24	VSS			VSS_NCTF		A50	
BE30	VSS			VSS_NCTF		A52	
BE34	VSS			VSS_NCTF		A53	
BE38	VSS			VSS_NCTF		B52	
BE42	VSS			VSS_NCTF		D53	
BE46	VSS			VSS_NCTF		E53	
BE48	VSS			VSS_NCTF			
BE50	VSS						
BF3	VSS						
BF9	VSS						
BF49	VSS			VSS_NCTF		BE1	
BF51	VSS			VSS_NCTF		BF1	
BG4	VSS			VSS_NCTF		BH1	
BG12	VSS			VSS_NCTF		BH2	
BG18	VSS			VSS_NCTF		BJ1	
BG24	VSS			VSS_NCTF		BJ2	
BG50	VSS			VSS_NCTF		BJ4	
BH7	VSS			VSS_NCTF		BJ5	
BH9	VSS						
BH11	VSS						
BH15	VSS			VSS_NCTF		BE53	
BH19	VSS			VSS_NCTF		BE53	
BH23	VSS			VSS_NCTF		BH52	
BH31	VSS			VSS_NCTF		BH53	
BH35	VSS			VSS_NCTF		BJ49	
BH39	VSS			VSS_NCTF		BJ50	
BH43	VSS			VSS_NCTF		BJ52	
BH47	VSS			VSS_NCTF		BJ53	

※TP必要

Henderson CS  
Delete TP for NC/VSS\_NCTF  
■ 2009/7/2

BD820M57 SLGZO

A standard electronic ground symbol consisting of three parallel diagonal lines of decreasing width, with the text "GND" centered below them.

■ REF: Calpella Platform Base. FCLBS0

DESIGNED BY

T. Ichimura

TITLE
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FHNSY 1

FUNCTION

Ibex Peak-M (15)

SH. NO.

174

PAGE NO.
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0 3 3

REV. MARK
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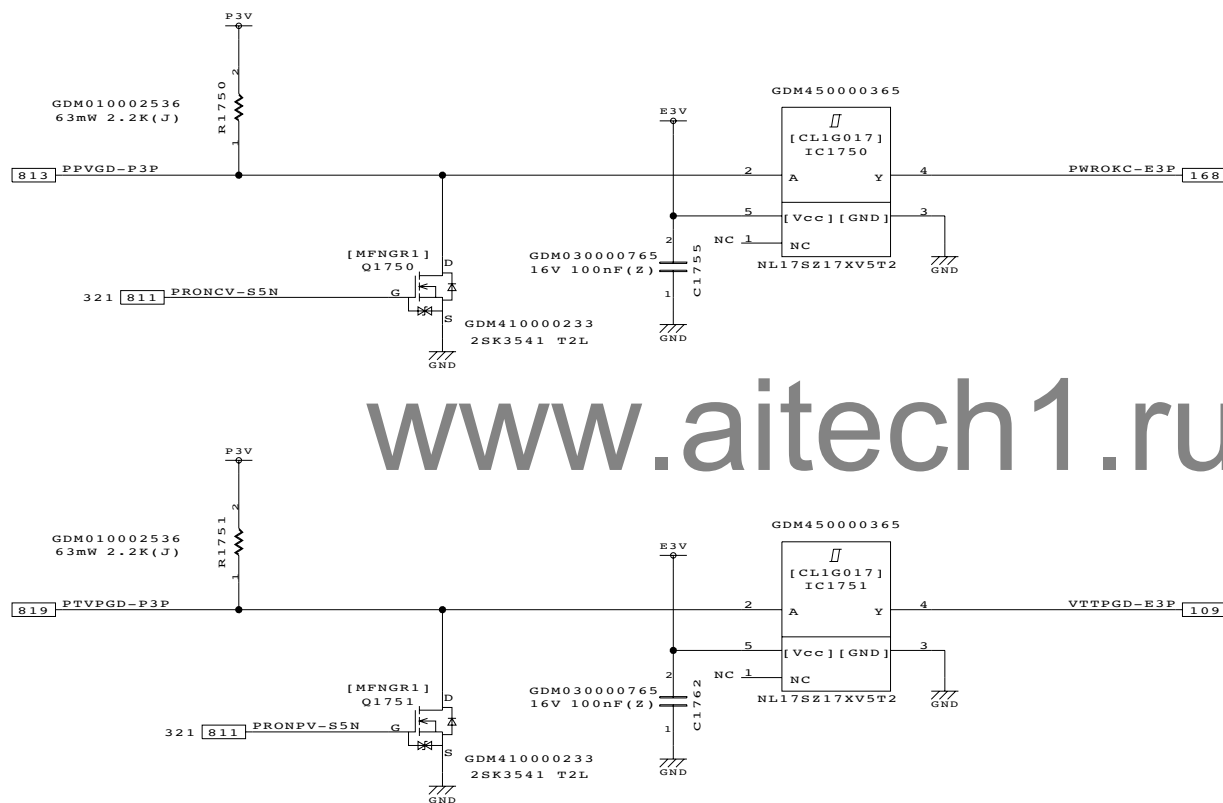
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DRAWING . NO .

3 6 0 0 6 9 7 6 9

2009.10.15 17:09 G11

TOSHIBA CORPORATION



REF: Calpella Platform Base. FCLBS0

DESIGNED BY

T. Ichimura

TITLE

FHNSY1

FUNCTION

IMVP-6.5 POWER OK

SH.NO.

175

PAGE NO.

034

REV.MARK

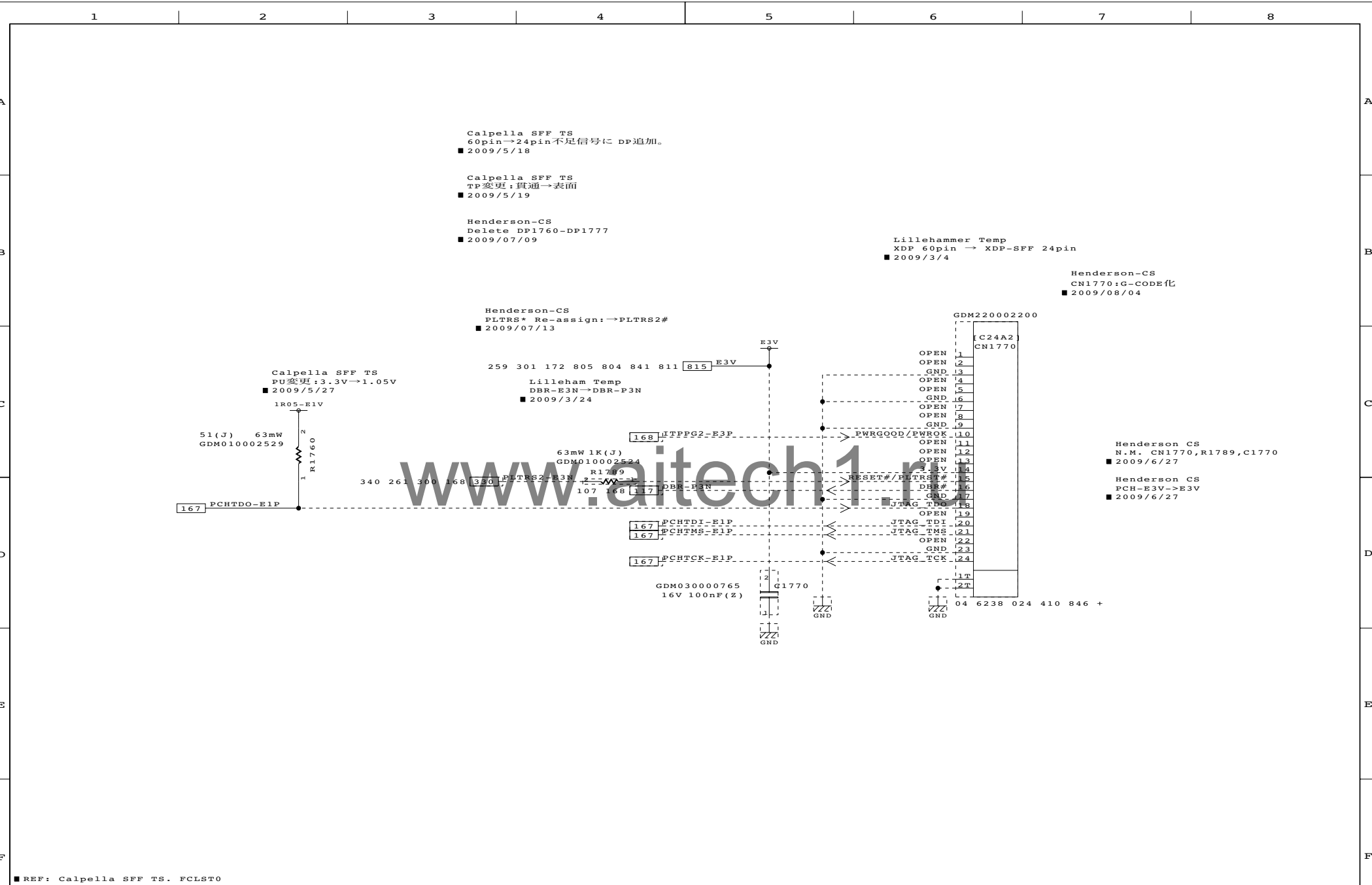
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DRAWING.NO.

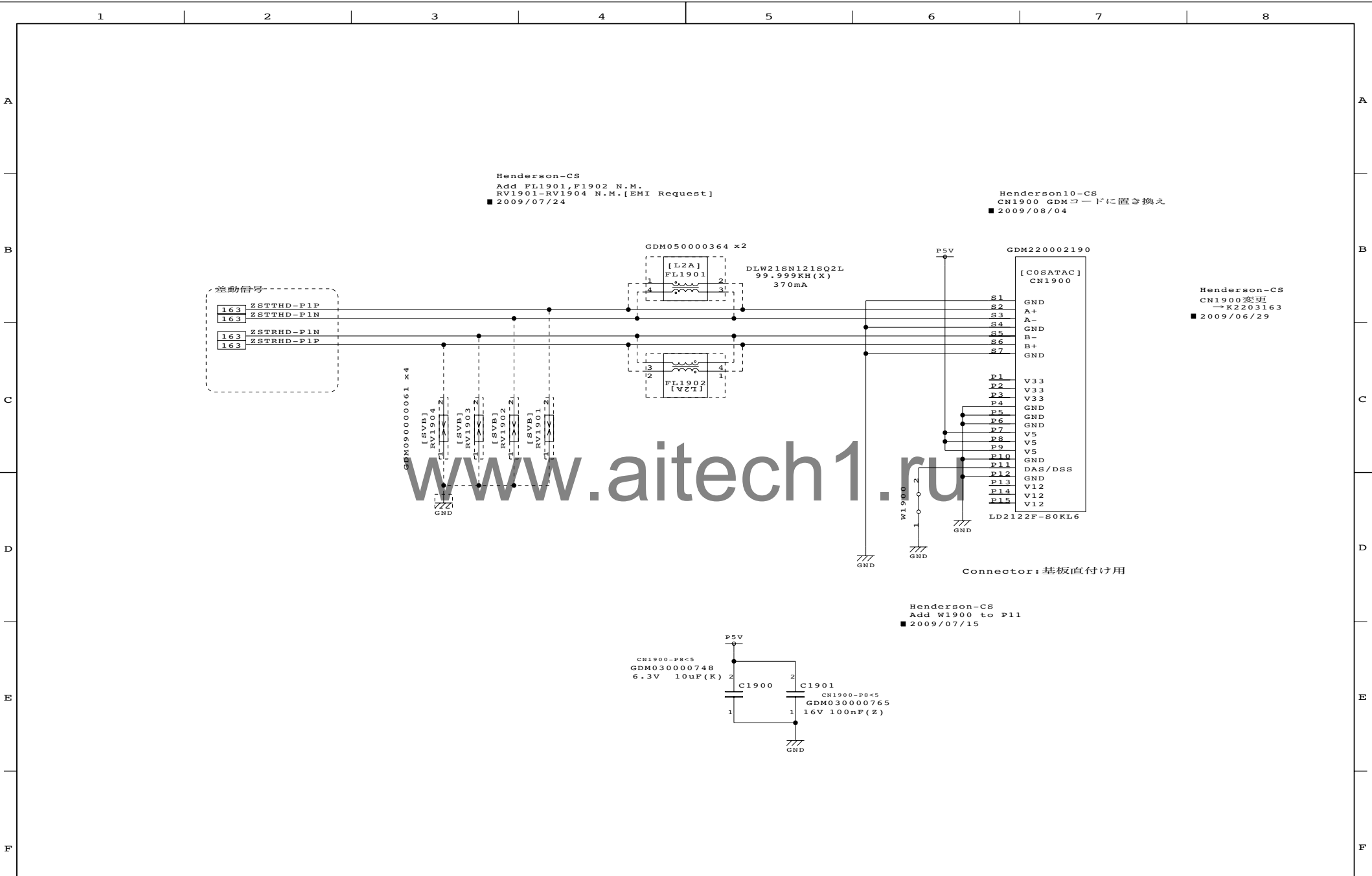
360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION



■ REF: Calpella SFF TS. FCLST0									
DESIGNED BY		TITLE		FUNCTION		SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
Ling.Yu		FHNSY1		PCH ITP-XDP 24pin		177	035	00	360069769
2009.10.15 17:09 G11					TOSHIBA CORPORATION				



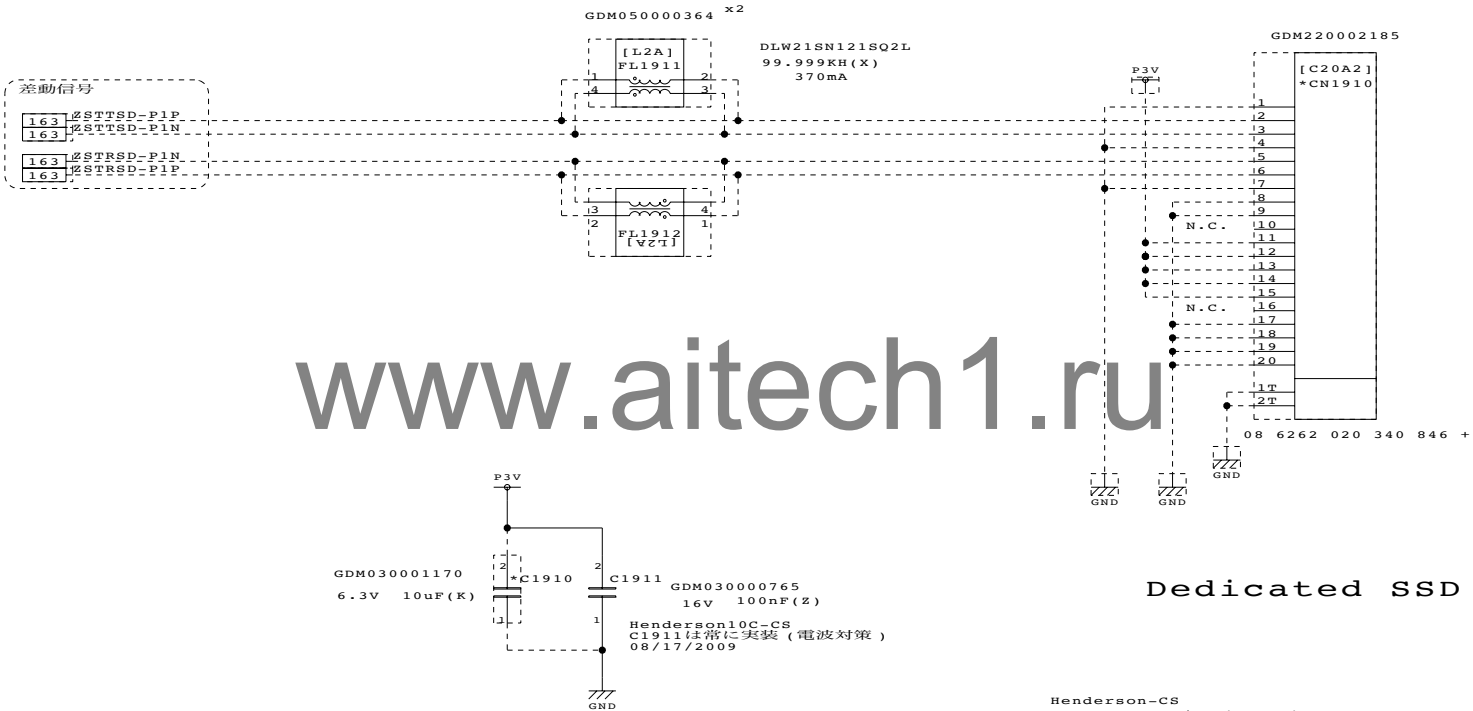
DESIGNED BY T.OCHIAI	TITLE FHNSY1	FUNCTION SATA HDD I/F	SH.NO. 190	PAGE NO. 036	REV.MARK 00	DRAWING.NO. 360069769
2009.10.15	17:09					TOSHIBA CORPORATION



仕向け設定有

Henderson-CS  
Add FL1911, F1912 N.M.  
[EMI Request]  
■ 2009/07/24

SSDコネクタ : ハーネス経由用



Dedicated SSD

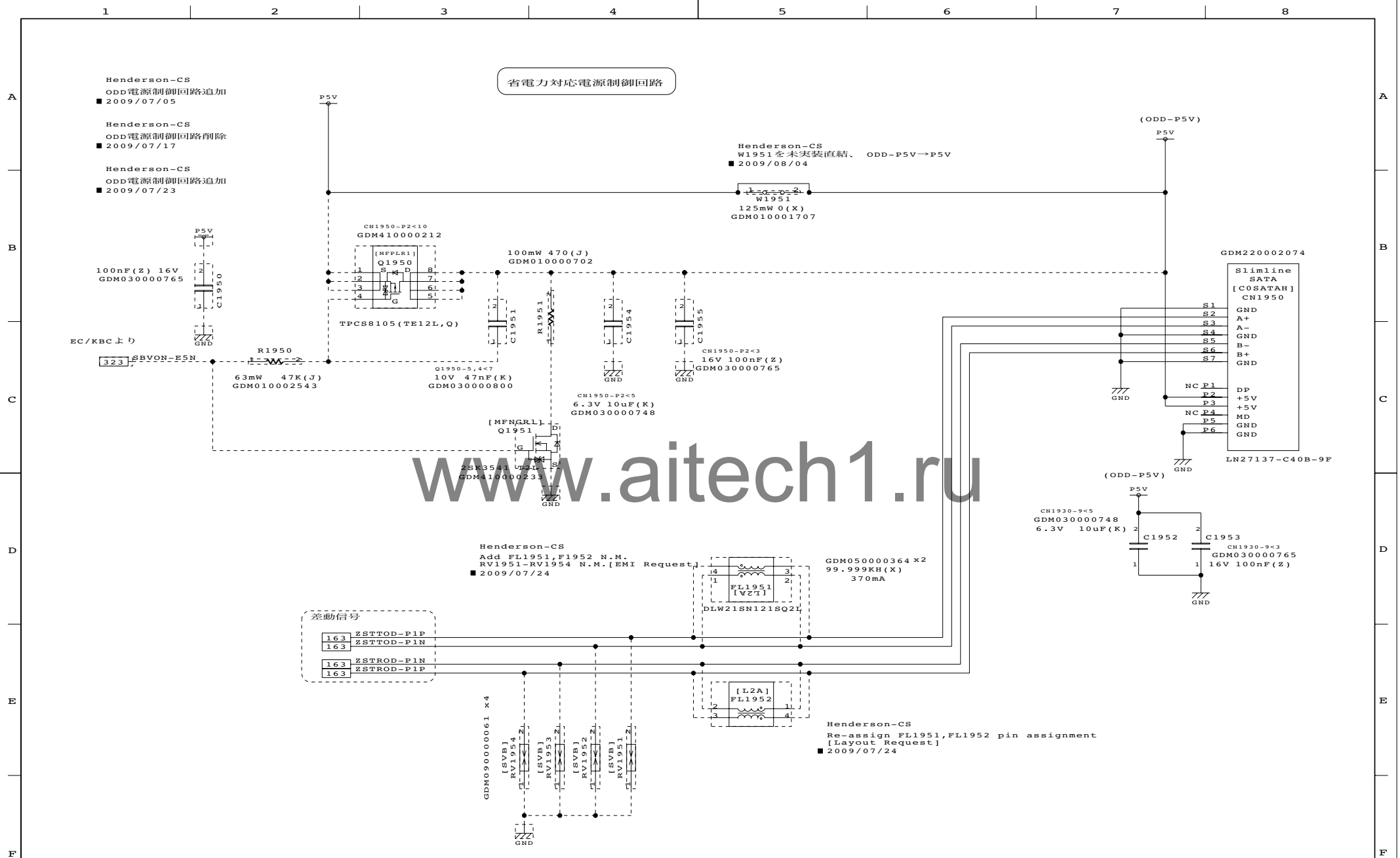
Henderson-CS  
Update SSD I/F Pin Assignment  
■ 2009/07/13

■ REF: Duluth10 (VP) . FDUSY2

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
Ling.Yu	FHNSY1	Dedicated SSD I/F	191	037	00	360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION



DESIGNED BY

T. Ichimura

TITLE

FHNSY1

FUNCTION

SATA ODD I/F

SH.NO.

195

PAGE NO.

038

REV.MARK

00

DRAWING.NO.

360069769

2009.10.15 17:09

TOSHIBA CORPORATION

仕向け設定有

Henderson-CS  
USB Port8 Signal Name Change:  
ZUSBS-E3\* -> ZUSBC8-E3\*  
■ 2009/6/30

Malgow-AMD\_TS  
eSATAにEMIフィルタを追加  
電波担当依頼により、Tx,Rx両方に追加  
■ 2007/12/21

Malgow-6ply\_VP  
EMIフィルタをジャンパに変更  
■ 2008/05/02

Malgow-6ply\_CS  
リピータのバイパスライン追加  
■ 2008/02/28

eSATA Model判別  
L:eSATA  
H:No eSATA

ESTMDL-E3N 166

Henderson-CS  
Add eSATA Module Detect Circuit  
(Add R1970,R1971)  
■ 2009/7/6

USB1PS-E5V

460 462 USB1PS-E5V

465 ZUSBC8-E3N  
465 ZUSBC8-E3P

[L2A]  
FL1970

GDM050000364  
99.999KH(X) 370mA

198 ZSTTES-P1P ---\*W1974  
198 ZSTTES-P1N ---\*W1975

198 ZSTTBP-P1P ---\*W1976  
198 ZSTTBP-P1N ---\*W1977

198 ZSTRES-P1N ---\*W1976  
198 ZSTRES-P1P ---\*W1977

198 ZSTRBP-P1N ---\*W1972  
198 ZSTRBP-P1P ---\*W1973

GDM010001695  
63mW 0(X)

Henderson-CS  
Delete C1970  
■ 2009/07/15

Henderson-CS  
CN2600変更  
→ GDM220002122  
■ 2009/06/15

GDM220002122  
[ESATA/USB]  
[COESATAUSB]  
\*CN1970

[USB]  
P1 VBUS  
P2 D-  
P3 D+  
P4 GND

[ESATA]  
P5 GND  
P6 A+  
P7 A-  
P8 GND  
P9 B-  
P10 B+  
P11 GND

eSATA-Combo

CN1970-1<3  
16V 100nF(Z)  
GDM030000765  
C1971 1

3Q38117-R33C5-7F

777 GND  
777 GND

DESIGNED BY

T.Ichimura

2009.10.15 17:09

TITLE

FHNSY1

FUNCTION

eSATA/USB I/F

SH.NO.

197

PAGE NO.

039

REV.MARK

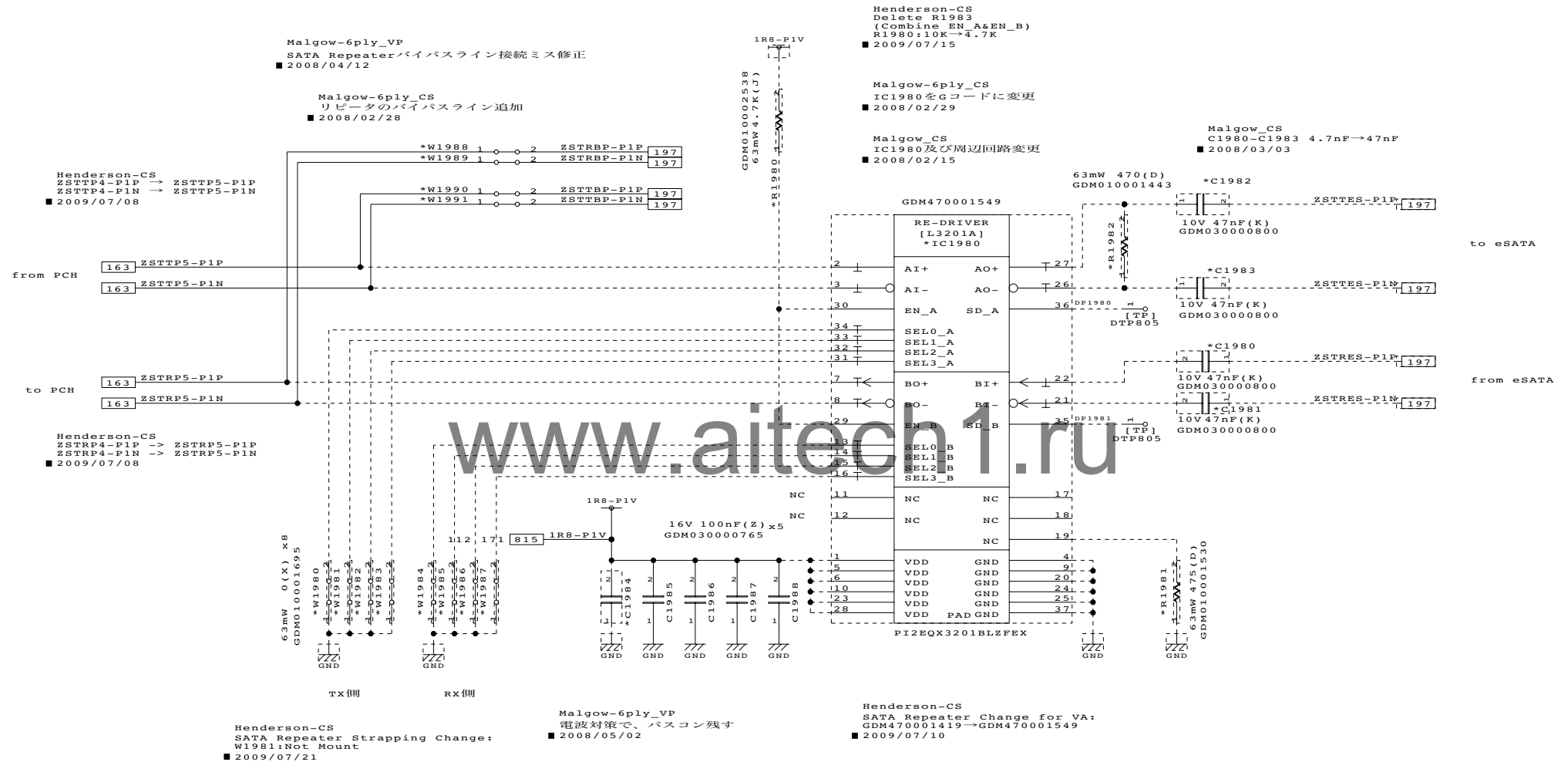
00

DRAWING.NO.

360069769

TOSHIBA CORPORATION

仕向け設定有



DESIGNED BY

T.OCHIAI

2009.10.15

17:09

G11

TITLE

FHNSY1

FUNCTION

SATA REPEATER

SH.NO.

198

PAGE NO.

040

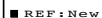
REV.MARK

00

DRAWING.NO.

360069769

TOSHIBA CORPORATION



DRAWING.NO.

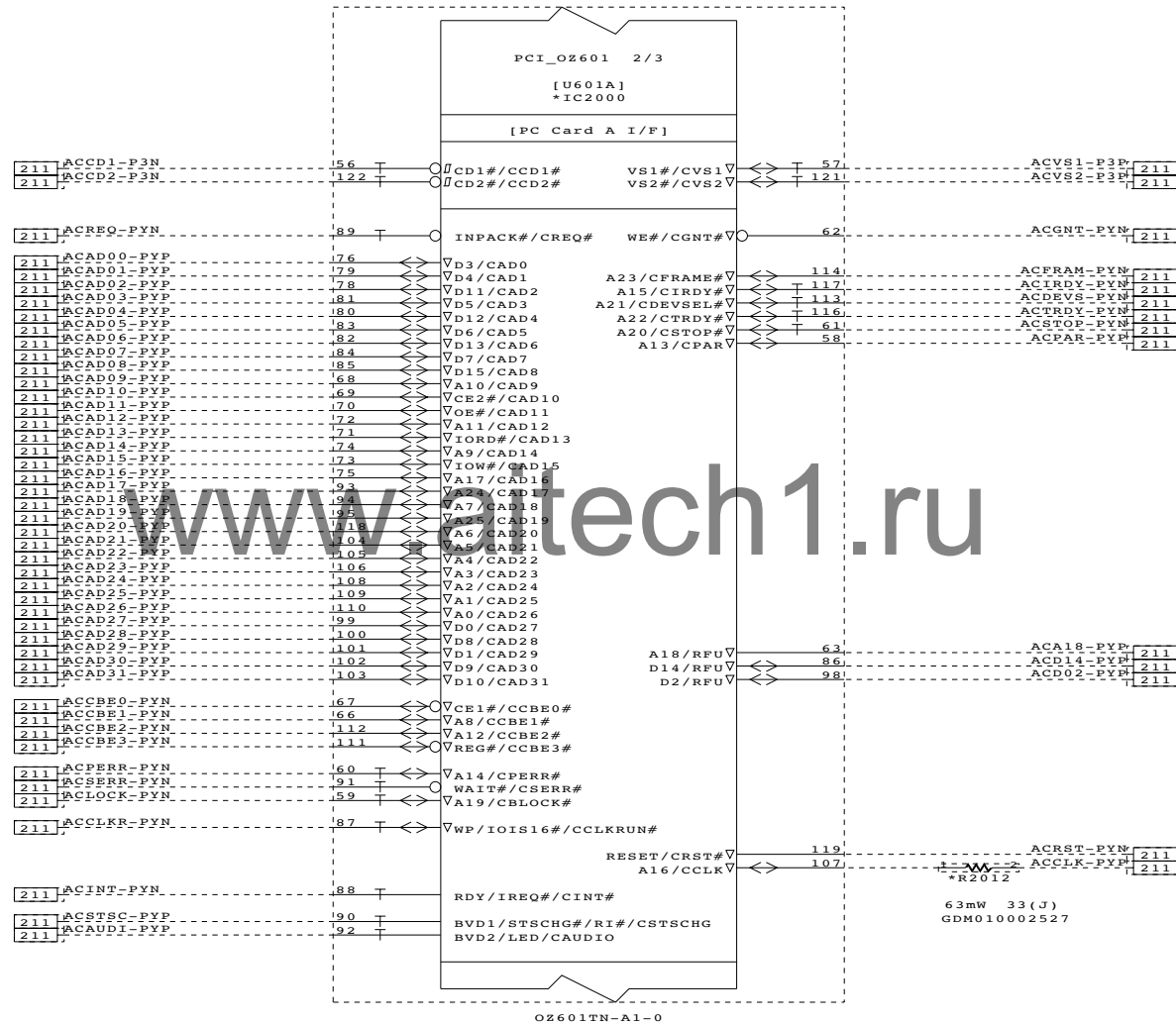
360069769

## 仕向け設定有

PCMCIA	PC Card /CS-B	Express Card /NO
IC2000 R2012	Mount	Not mount

Henderson10-CS  
change GDM Code.  
■ 2009/07/28

GDM460002381



■ REF:NEW

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.OCHIAI	FHNSY1	PC CARD CONT(2)	201	042	00	360069769

2009.10.15 17:09 G11

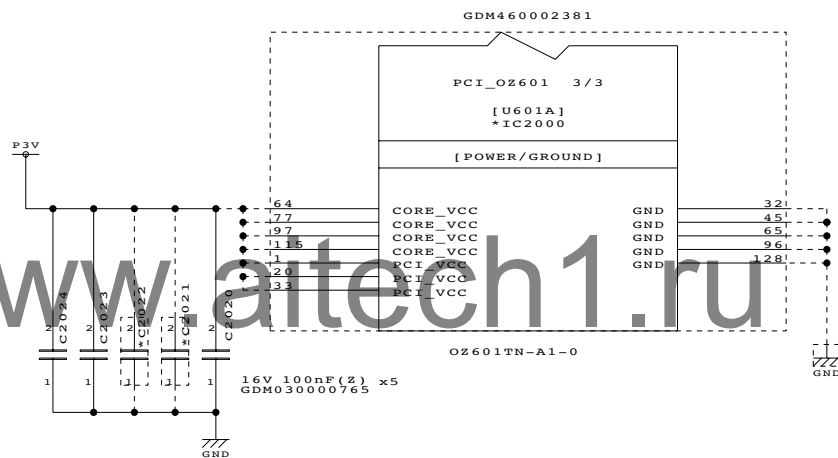
TOSHIBA CORPORATION

## 仕向け設定有

PCMCIA	PC Card /CS-B	Express Card /NO
IC2000	Mount	Not mount

Henderson10-CS  
Change new PC-Card Cont.  
■ 2009/07/13

Henderson10-CS  
change GDM Code.  
■ 2009/07/28



■ REF:NEW

DESIGNED BY

T.OCHIAI

TITLE

FHNSY1

FUNCTION

PC CARD CONT(3)

SH.NO.

202

PAGE NO.

043

REV.MARK

00

DRAWING.NO.

360069769

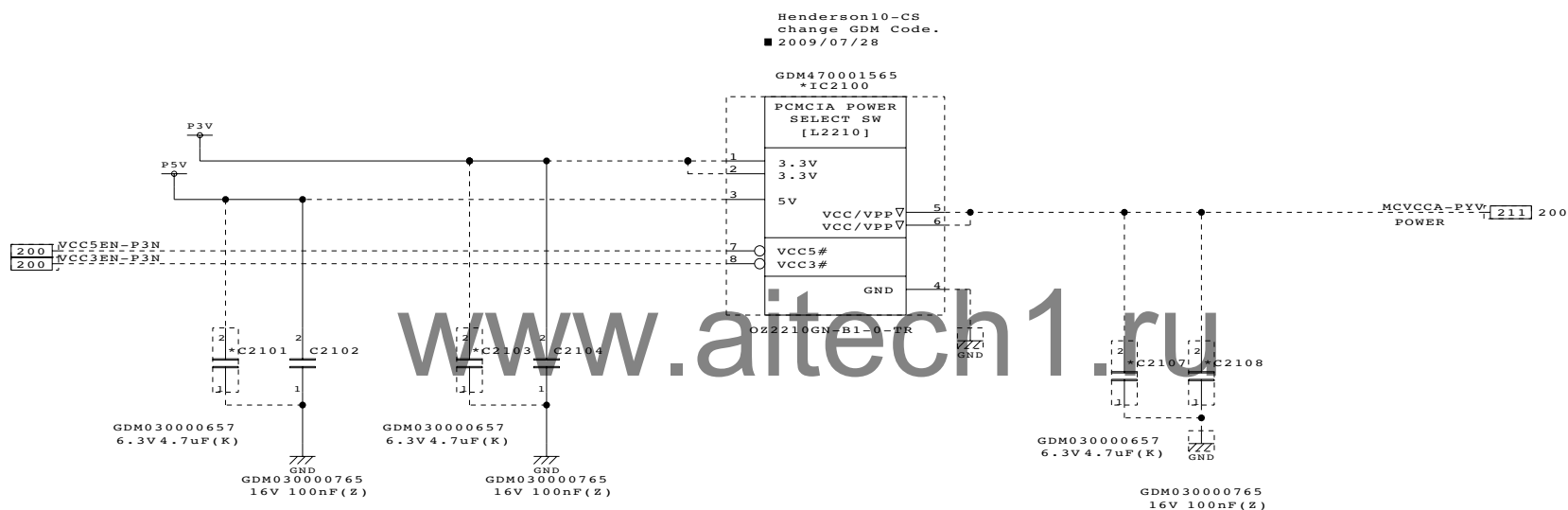
2009.10.15 17:09 G11

TOSHIBA CORPORATION

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

Henderson10-CS  
Change new PC-Card Power SW  
■ 2009/07/13

PCMCIA	PC Card /CS-B	Express Card /NO
C2101 C2103 C2107 C2108 IC2100	Mount	Not mount



REF:NEW

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.OCHIAI	FHNSY1	PC-Card POWER	210	044	00	360069769

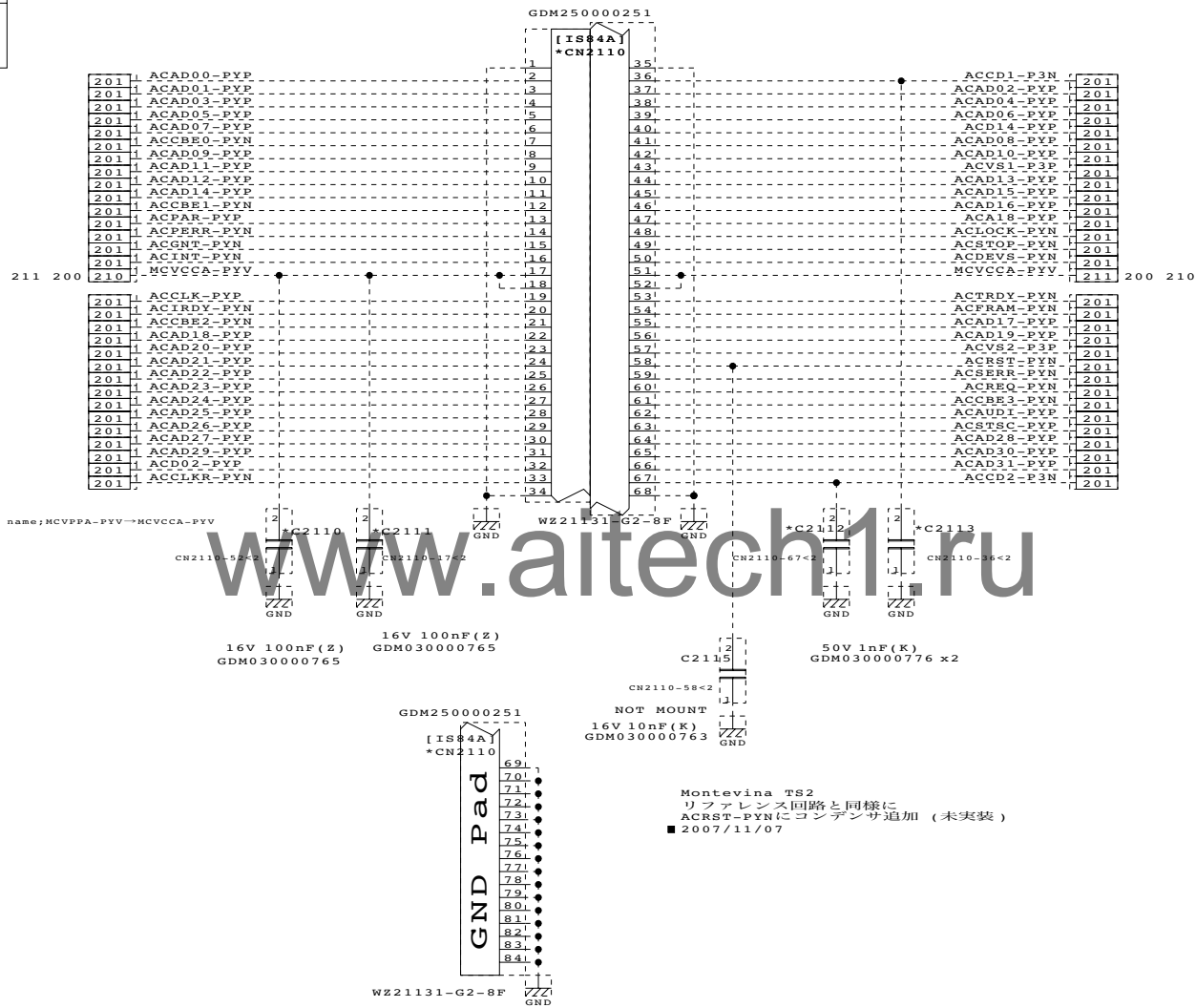


## 仕向け設定有

PCMCIA	PC Card /CS-B	Express Card /NO
C2110 C2111 C2112 C2113 CN2110	Mount	Not mount

Henderson-CS  
CN2110変更  
■ 2009/06/29

Henderson10-CS  
CN2110 GDMコードに置き換え  
■ 2009/08/04



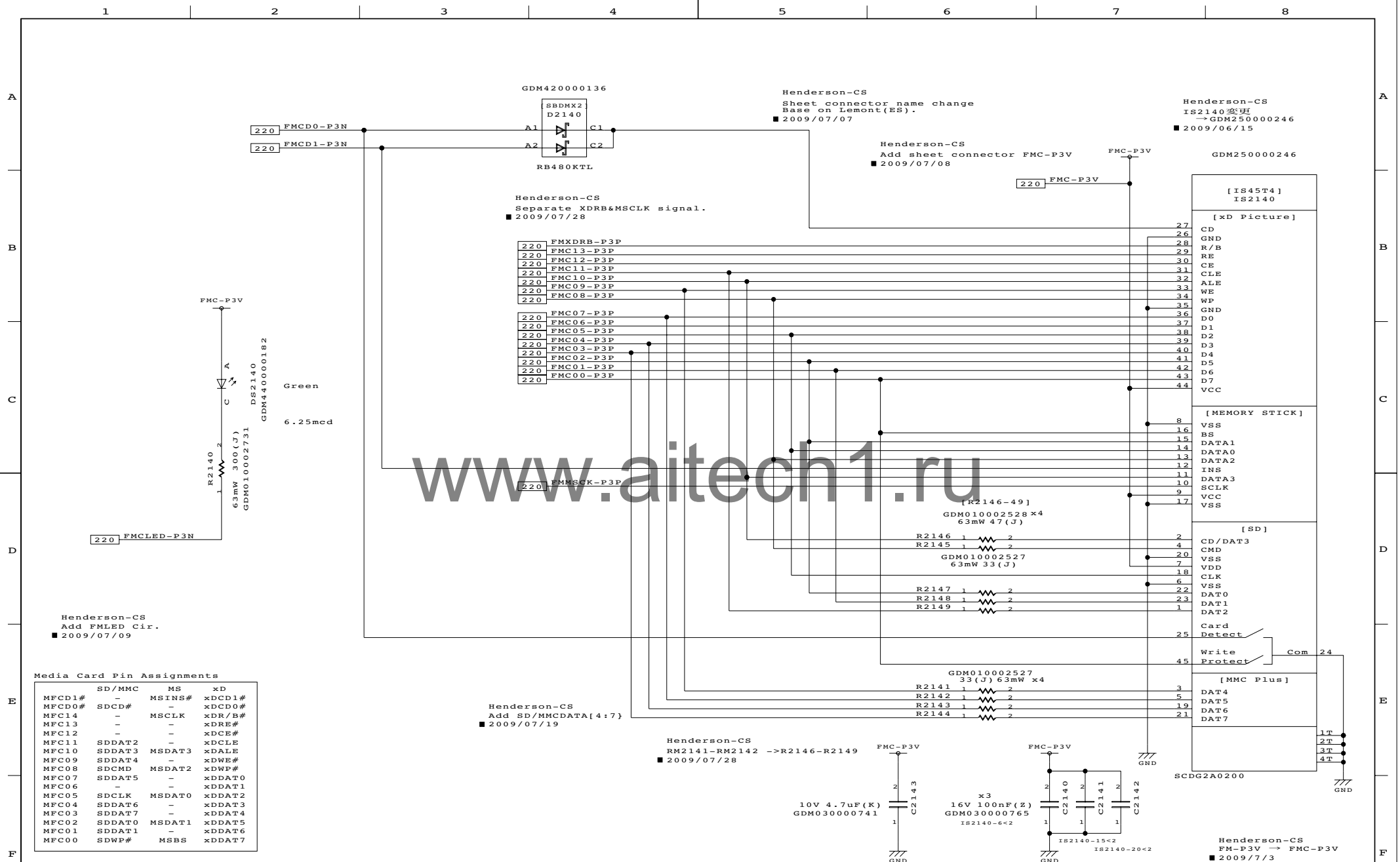
Henderson-CS  
Change Signal name;MCVPPA-PYV→MCVCCA-PYV  
■ 2009/7/13

Henderson10-CS  
PC Card Headerを  
Kコードに変更  
■ 2009/03/30

Henderson-CS  
Add PC-Card/Ex-Card Module Detection Circuit  
■ 2009/7/6

■ REF: Santa Rosa Base . FSRBS0

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura/L.Yu	FHNSY1	PC-CARD I/F	211	045	00	360069769
2009.10.15	17:09	G11				



■ REF: Lemont Base . FLNSY10

DESIGNED BY

T. Ichimura/JZ.Yu

TITLE

FHNSY1

FUNCTION

MEDIA BRIDGE I/F

SH.NO.

214

PAGE NO.

046

REV.MARK

00

DRAWING.NO.

360069769

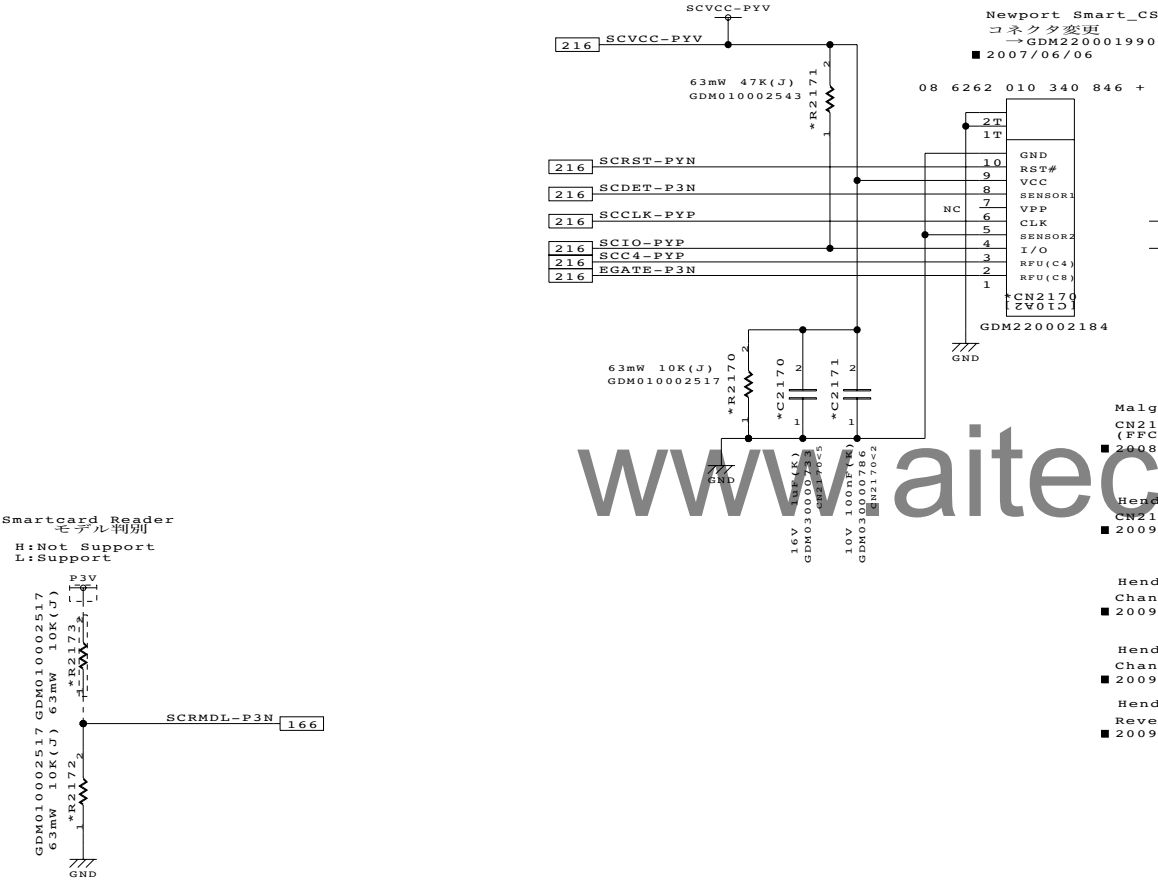
2009.10.15 17:09 G11

TOSHIBA CORPORATION



※Port 1未使用時は  
Lに設定すること

仕向け設定有



Smart Card Socket

Malgow\_VP  
CN2170をGDM220002079に変更  
(FPC→FPC変更対応)  
■2008/03/24  
Henderson-CS  
CN2170をGDM220002184に変更  
■2009/6/29

Henderson-CS  
Change CN2170 Pin Assignment  
■2009/07/02  
Henderson-CS  
Change CN2170 Pin Assignment  
■2009/07/14  
Henderson-CS  
Reverse CN2170 Pin Assignment  
■2009/07/15

Smart Card Socketのコンタクトのアサイン

Contact No.	Assignment	Contact No.	Assignment
C1	VCC	C5	GND
C2	RST	C6	VPP
C3	CLK	C7	I/O
C4	AUX1	C8	AUX2

AUX1 is used by function code (FCB) for type 2 synchronous cards (ISO/IEC 7816-10).  
If an I/F device provides a USB I/F, VCC shall be used by VBUS, AUX1 by D+ and AUX2 by D-.  
The use of AUX1 and AUX2 by the USB I/F does not preclude the use of these contacts by other protocols or other I/F devices defined in this International Standard series.  
Such use is reserved by ISO/IEC JTC1/SC17.

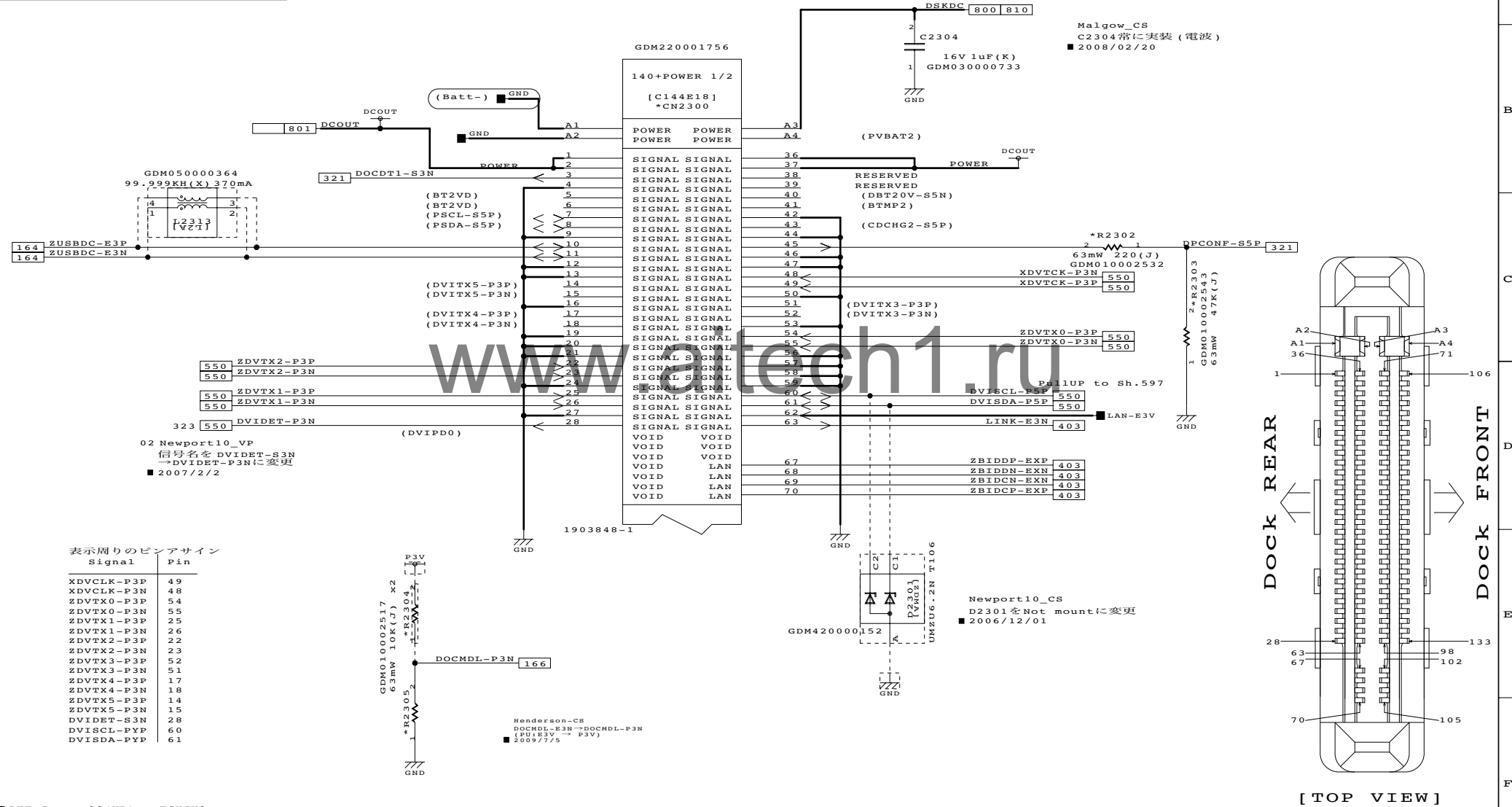
ISO/IEC 7816-2 AMENDMENT 1 (2004-06-01)より

```
FLNSY0 ES
R2002,2003置換え
GDM010001756
-> GDM010002543
2009/02/09
```

仕向け設定有

Docker	YES	NO
L2313,D2301	Not Mount	
CN2300, C2304 R2302,R2303 R1715	Mount	Not Mount
R1714	Not Mount	Mount

Henderson-CS  
CN2300変更  
→GDM220001756  
■ 2009/06/15



■ REF:Canary10(VP) . FCYSY1

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura/T.Naruse	FHNSY1	DOCKING I/F 1	230	050	00	360069769

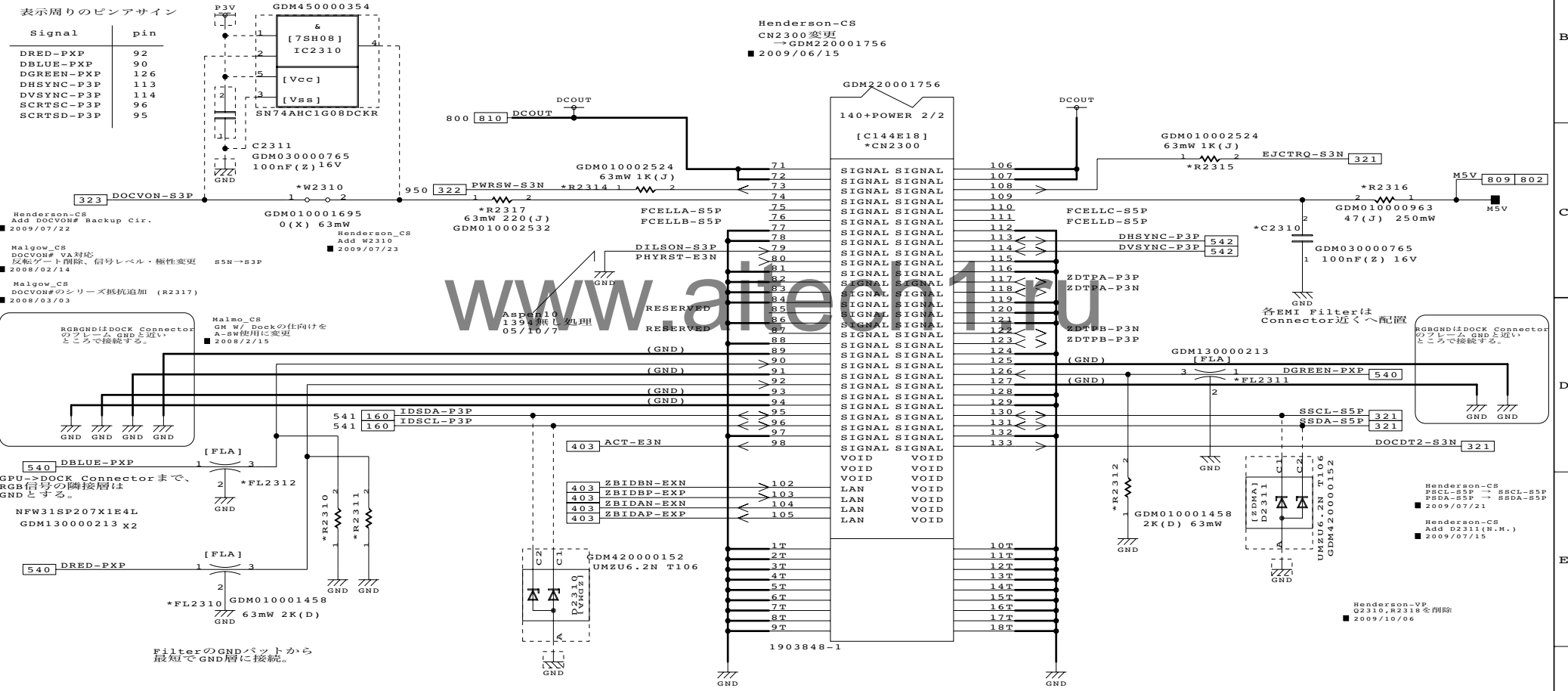
仕向け設定有

Docker	YES	NO
CN2300 C2310 R2314-R2316	Mount	Not Mount

	GM W/ Dock	GM/GL W/o Dock	PM W/ Dock
R2310-R2312 FL2310-FL2312 IC2311	Mount NotMount NotMount	NotMount Mount Mount	NotMount Mount Mount

表示周りのピンアサイン

Signal	pin
DRED-PXP	92
DBLUE-PXP	90
DGREEN-PXP	126
DHSYNC-P3P	113
DVSYNC-P3P	114
SCRTSC-P3P	96
SCRTSD-P3P	95



REF:Malgow(VP) . FGGIN2

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura/T.Naruse	FHNSY1	DOCKING I/F 2	231	051	00	360069769





仕向け設定有

PCMCIA	PC Card	Express Card	NO	CS-B
R2520 R2522 RM2520 C2521 C2523 C2525 C2526 C2527 C2528	Not mount	Mount	Not mount	Mount
R2521	Mount	Not mount	Mount	Not mount
IS2520	Not mount	Mount	Not mount	Not mount

A

B

C

D

E

F

A

B

C

D

E

F

Henderson-CS  
RM2520分解  
■ 2009/08/03

Henderson10-CS  
Express Card Headerを  
Kコードに変更  
■ 2009/03/30

Henderson-CS  
IS2520:→GDM250000254  
■ 2009/08/04

Newport10\_CS  
部品変更 GDM250000149→K2500244  
■ 2006/10/20

Newport10\_CS  
部品変更 K2500244→GDM250000200  
■ 2006/11/28

Henderson-CS  
IS2520部品変更 K2500327→K2500339  
■ 2009/07/02

164 ZUSBEX-E3N  
164 ZUSBEX-E3P  
251 CPUSB-E3N

260 168 401 DEWAKE-E3N  
251 CRDRST-E3N

251 CRDCRQ-E3N  
251 CPPE-E3N  
169 XPECRD-P0N  
169 XPECRD-P0P

162 ZERC RD-P1N  
162 ZERC RD-P1P

162 ZETCRD-P1N \*C2521

162 ZETCRD-P1P \*C2523

10V 100nF(K) x2  
GDM030000786

Newport10 CS  
部品追加 Express Coupling  
C2521,C2523  
■ 2006/11/14

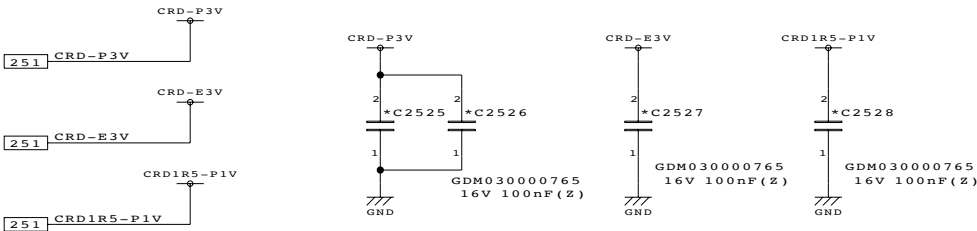
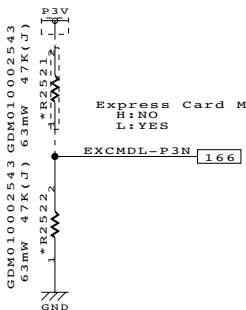
GDM250000254

IS26T2  
\*IS2520

1CH4112C-TH

GND

GND



ExpressCard サポート時は本 Sheet の  
全ての部品を Mount する  
関連Sheet: 162, 169, 251

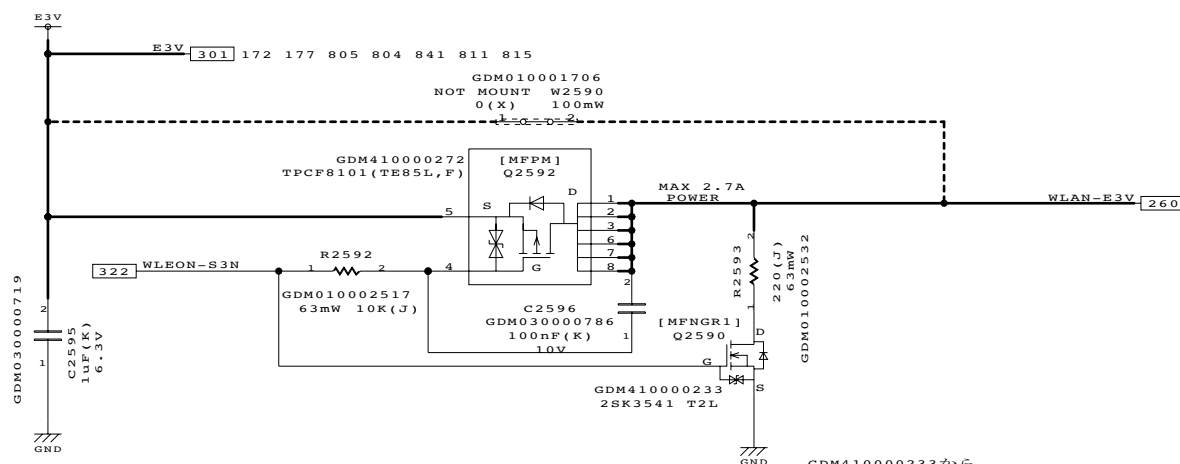
■ REF:Utah10 (VP) . FUTS81

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura/L.Yu	FHNSY1	EXPRESSCARD I/F	252	053	00	360069769

2009.10.15 17:09 G11

## WLAN/WiMAX電源

TOSHIBA CONFIDENTIAL



GDM410000233から、  
GDM410000267の2  
nosokawa070112a

www.aitech1.ru

PCI Express(TM) Mini Card Electromechanical Specification  
Rev 1.0 (June 2, 2003) ↓

Power Rail	Voltage Tolerance	D0-D2 D3 hot Power(*)		Auxiliary Pow(**)	
		Peak (max) mA	Normal (max) mA	Peak (max) mA	Normal (max) mA
3.3Vaux	± 9%	2750	1100	1750 (wake enabled)	250(wake enabled) 5(not wake enabled)
+1.5V	± 5%	500	375	N/A	N/A

\*:When available, the total power drawn by a PCI Express Mini Card function for the sum of +3.3V and 3.3Vaux shall not exceed 750mA(Normal max) and 1,000mA(Peak max)

\*\*\*:The auxiliary current limit only applies when the primary +3.3V and +1.5V Vvoltage sources are not available; i.e., the card is in a low power D3 state.

Definitions:

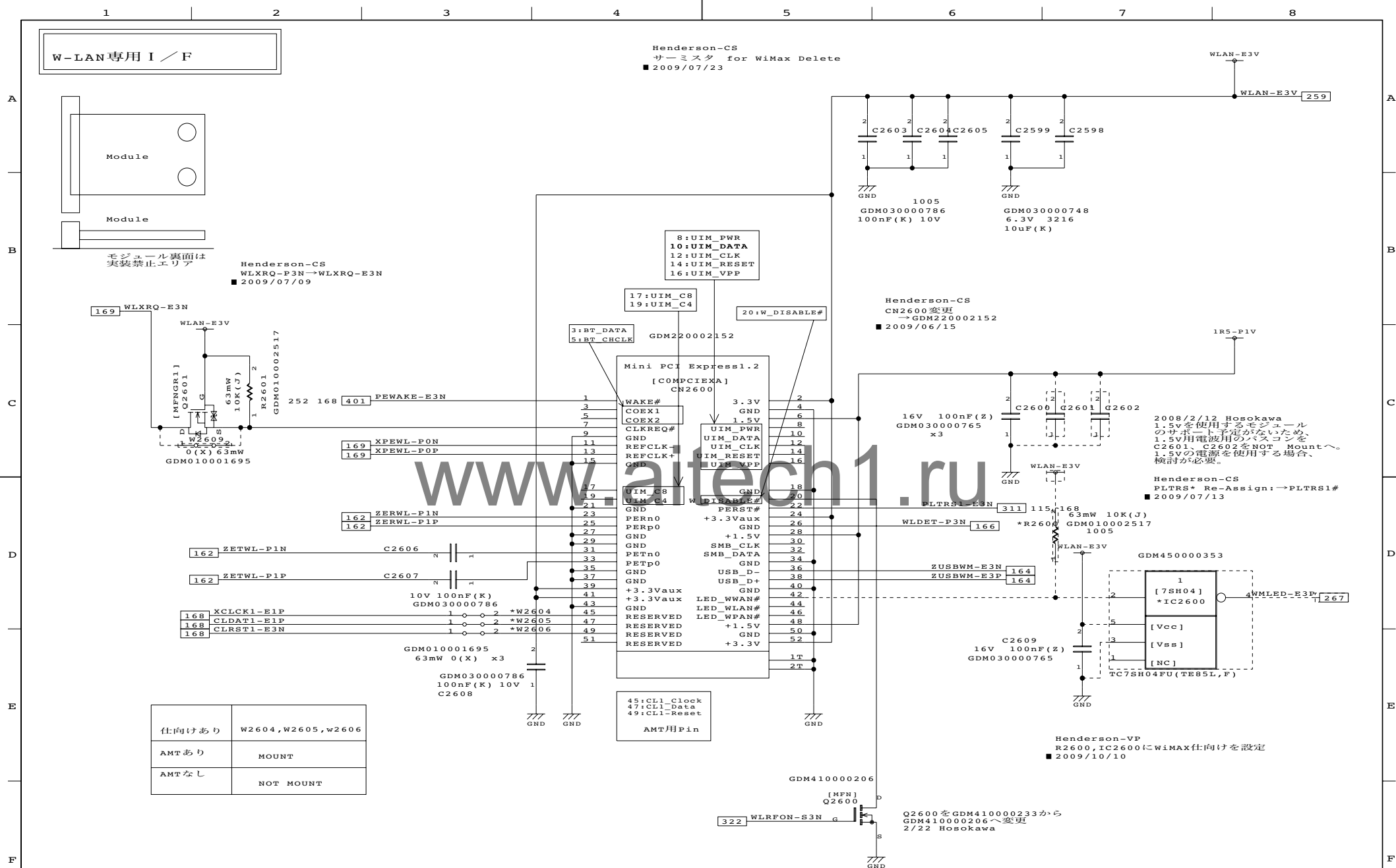
Peak - The highest averaged current value over any 10-millisecond period.  
Normal - The highest averaged current value over any 1-second period.

REF: Moldau10(CS) . FMUSY0

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T. Hosokawa	FHNSY1	WLAN / WiMAX Power	259	054	00	360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION



DESIGNED BY

T. Hosokawa

TITLE

FHNSY1

FUNCTION

PCI-E MINI CARD

SH.NO.

260

PAGE NO.

055

REV.MARK

00

DRAWING.NO.

360069769

2009.10.15 17:09

TOSHIBA CORPORATION

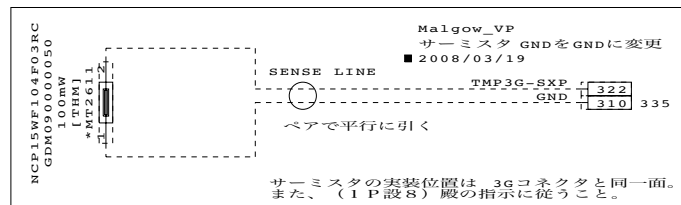
## 3 G Module

TOSHIBA CONFIDENTIAL

## 仕向け設定有

3G/Robson	YES	NO
R2610	Mount	Mount
W2614	Not Mount	Not Mount
上記部品以外全て	Mount	Not Mount

Henderson-VP  
アナログ GND分離用ジャンパ削除による信号名変更  
■ 2009/10/15

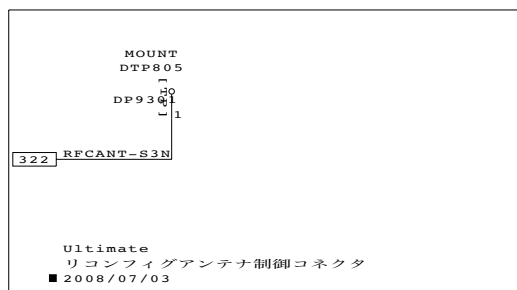


Henderson-CS  
GND -> TMP3G-GND  
■ 2009/07/08

Henderson-CS  
2610変更  
→GDM220002152  
■ 2009/06/15

Gr.	有	無
3G	有	無
C2613, C2614 C2616, C2617 C2619, C7700 CN2610 MT2611, Q2610 Q2611, Q2612 R2611, R2612	MOUNT	NOT MOUNT

Henderson-CS  
Robson I/F削除  
■ 2009/7/3



Malgow\_CS  
Q2613を未実装  
(G-S逆転、VPで修正)  
■ 2008/03/06

37, 43pinをGNDに追加  
06/04/07

Malgow\_CS  
C2611常に実装 (電波)  
■ 2008/02/20

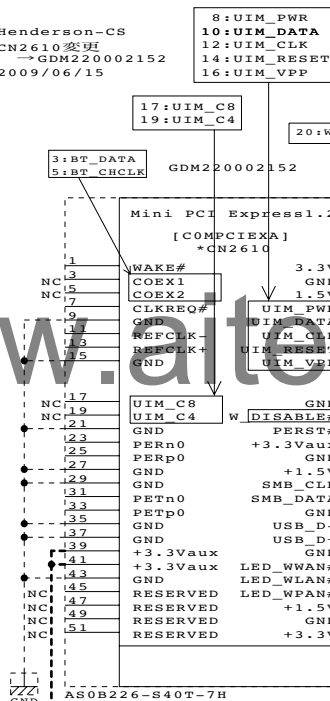
■ REF: Newport10(VP) . FNPSY1

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
S.Anwar/T.OCHIAI	FHNSY1	PCI-E MINI Card(3G)	261	056	00	360069769

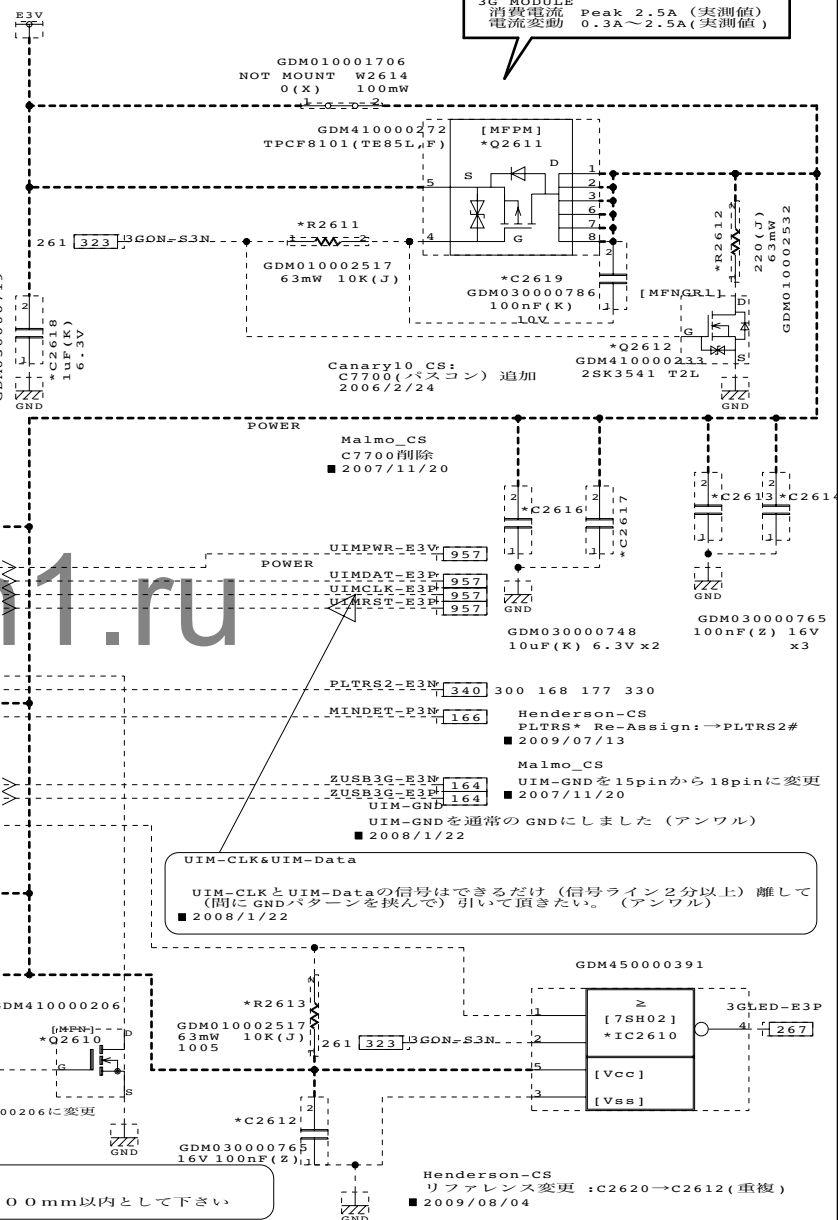
2009.10.15 17:09 G11

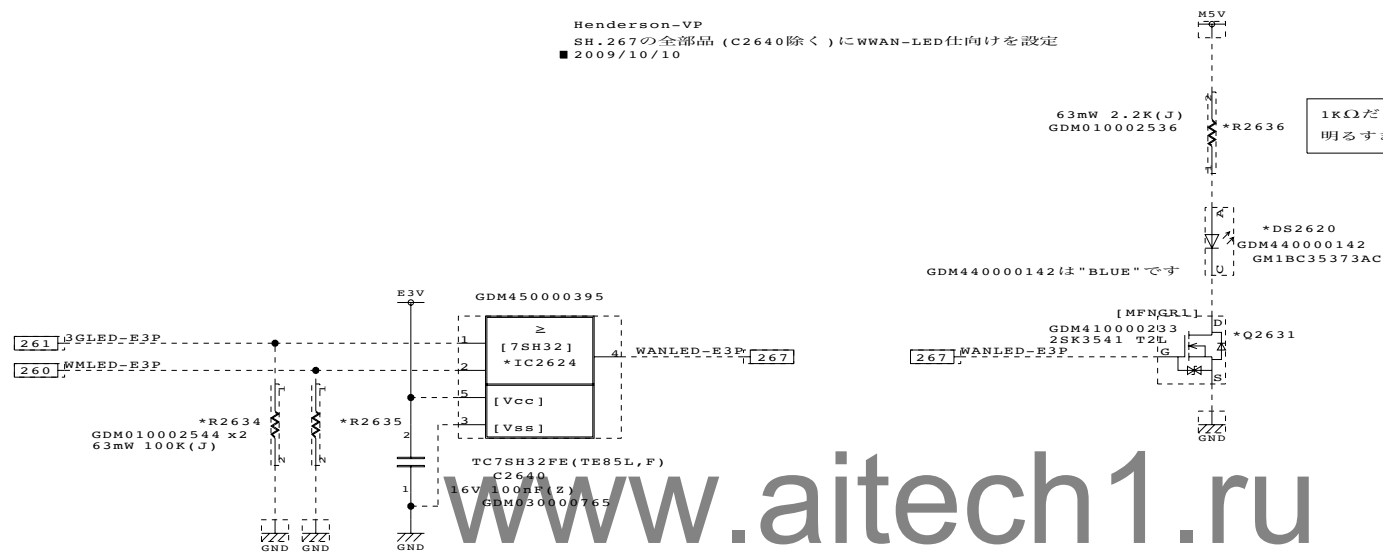
TOSHIBA CORPORATION

www.attech1.ru



3G用PCI-E Mini Cardソケットと  
SIM CARD ソケット間のライン長は200mm以内として下さい





Ref:Wengen CS

DESIGNED BY	2009/10/15	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
H.Gushiken		FHNSY1	3G(WWAN) LED	267	057	00	360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION

仕向け設定有

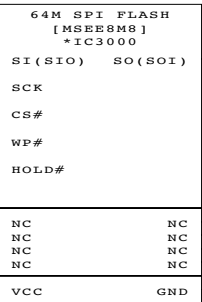
Henderson10/10C F/W Code

	AMT	NonAMT-Intel	NonAMT-Realtek
CS	GDM4A0001009 F0100901 FP	GDM4A0001013 F0101301 FT	GDM4A0001014 F0101401 FU
VP	GDM4A0001017 F0101701 FV	GDM4A0001018 F0101801 FW	GDM4A0001019 F0101901 FX

(SPI\_Part No:64Mbit/GDM460002384  
32Mbit/GDM460001975)

Henderson-VP  
IC3000,IC3002:VPコード適用  
■ 2009/09/24

(1st)  
GDM4A0001017



GDM010002527  
63mW 33(J)

R3001

1 2 SPIMIO-E3P

163

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64Mbit: 16pin

32M/16Mbit: 8pin

~~Dual Footprint要検討~~

www.aitech1.ru

Henderson-CS  
Delete Backup 2nd SPI Circuit  
■ 2009/07/21

Henderson CS  
Add Backup 2nd SPI circuit  
■ 2009/6/27

Henderson-CS  
PLTRS\* Re-Assign:→PLTRS2#  
■ 2009/07/13

Henderson-CS  
IC3000をGコード(生ROM)に変更  
■ 2009/08/01

	Ibex Peak	ME Function
16Mbit	PM55	(ME Ignition FW)
32Mbit	HM55, PM57, HM57	PAVP1.5, AT-p, Braidwood
64Mbit	PM57, HM57	PAVP1.5, AT-p, Braidwood, RPAT for Consumer
	QM57	PAVP1.5, AT-p, Braidwood, vPro 6.0 with RPAT, AT-d

■ REF: Calpella Platform Base. FCLBS0

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura/L.Yu	FHNSY1	FLASH ROM	300	058	00	360069769

2009.10.15 17:09

MDC	有り	無し
CN3010 R3010, R3011 C3011, C3012 IC3010	Mount	Not Mount
L3010 C3010	Not Mount	

Hamilton10 CS  
 CN3010をコネクタリスト  
 Rev01にあわせる  
 GDM220001530→GDM220001498  
 ■ 2006/9/26

Hamilton10 CS  
CN3010をコネクタリスト  
Rev02にあわせる  
GDM220001498→GDM220001721

2006/10/24  
Hamilton10 CS  
CN3010をコネクタリスト  
Rev03にあわせる

```
GDM220001721→GDM220001530
■ 2006/11/2
Hamilton10 CS
CN3010をコネクタリスト
Rev06にあわせる
GDM220001530→GDM220001721
■ 2006/11/16
```

Hamilton10 CS  
CN3010をコネクタリスト  
Rev07にあわせる  
GDM220001721→GDM220001530

```

■ 2006/11/24
Hamilton10 CS
CN3010をコネクタリスト
Rev08にあわせる
GDM220001530→GDM220001721
■ 2006/12/4

```



DRAWING . NO .  
360069769

故障予兆

配置候補地 3

常温測定用

NCP15WF104F03RC  
GDM090000050  
100mW  
100mW  
100mW  
100mW  
MF3100



SENSE LINE

ペアで平行に引く

Malgow-6ply\_VP  
未使用サーミスタを未実装  
■ 2008/05/02  
  
Malgow\_CS  
故障予兆用回路追加  
■ 2008/01/28

SENSE LINE

ペアで平行に引く

サーミスタの実装位置は ( PC開1 ) の指示に従うこと。

GDM010001695  
63mW 0(X)  
W3102 1 0 0 2  
W3103 1 0 0 2

TMPNRM-SXP  
GND 322 261 335 115 144 322 336

Henderson-VP  
アナログ GND分離用ジャンパ削除による信号名変更  
■ 2009/10/15

Malgow-6ply\_VP  
サーミスタ GNDをGNDに変更  
■ 2008/03/20

Malgow-6ply\_VP  
ジャンパを直結  
■ 2008/05/02

Henderson-CS  
ジャンパ直結 Delete  
■ 2009/07/09

Henderson-CS  
High Temp Thermistor Delete  
■ 2009/07/22

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■ REF:New

DESIGNED BY T.Ichimura	TITLE FHNSY1	FUNCTION PC Health PJ	SH.NO. 310	PAGE NO. 060	REV.MARK 00	DRAWING.NO. 360069769
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2009.10.15 17:09 G11



仕向け設定有

Henderson-CS  
PLTRS\* Re-Assign:→PLTRS1#  
■ 2009/07/13

Malgow\_VP  
R1651をSH.163から移動 ,R3110追加  
■ 2008/04/08

Henderson-CS  
Delete R3110  
N.M.R3111,PU:F3V→E3V  
FTDET-P3N→FTDET-E3N  
■ 2009/07/15

仮置き :PADに変更予定

GDM220001637

部品のピン配列

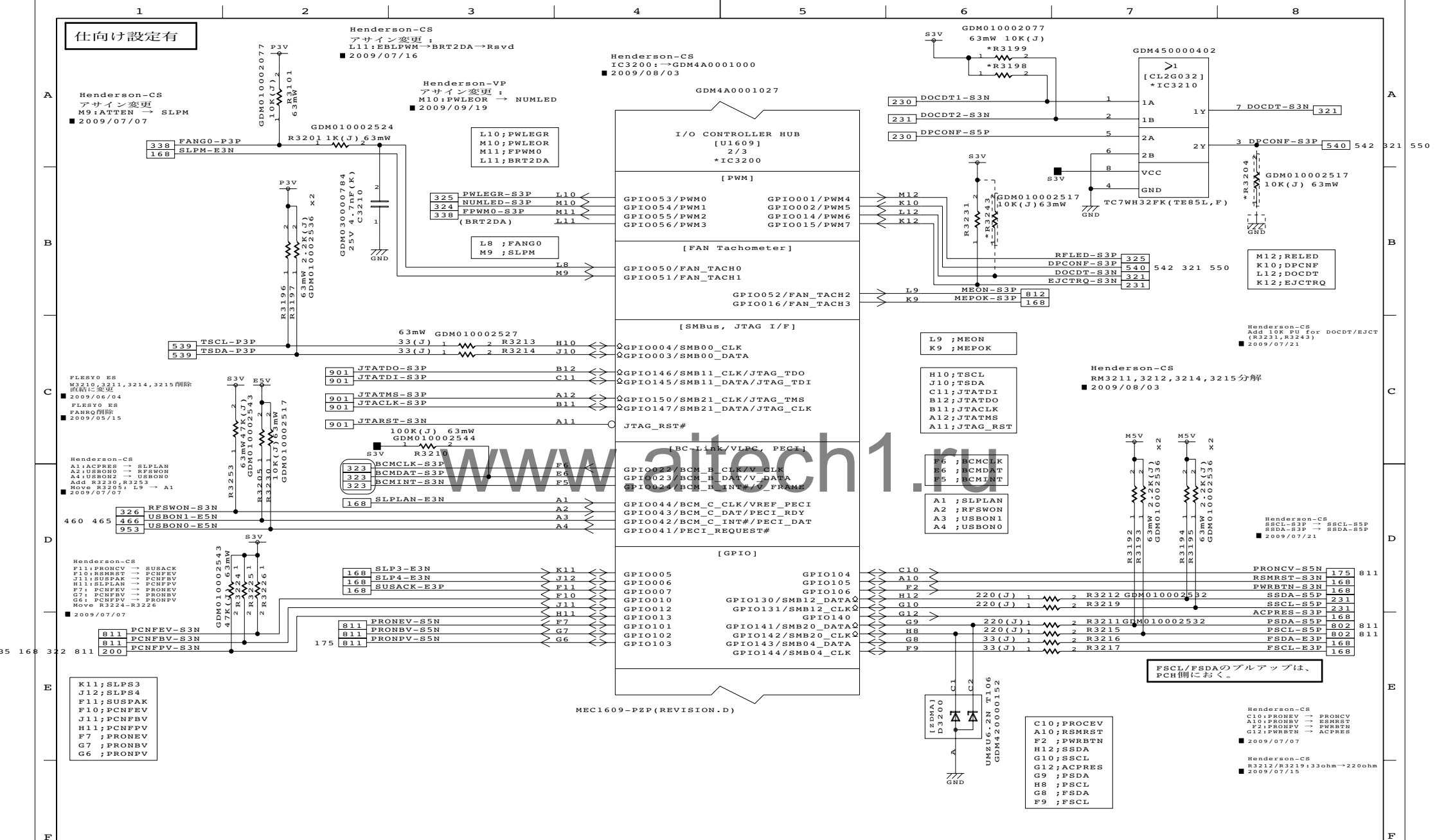
2	1
4	3
6	5
8	7
10	9
12	11

DF23C-120P-0.5V(91)  
E3110 0.3A/PIN  
16V 100nF(2)  
GDM030000765

■ REF:Malgow(VP) . FG6IN2

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Iwaki/T.Ichimura	FHNSY1	F/T PJ	311	061	00	360069769
2009.10.15	17:09 G11					

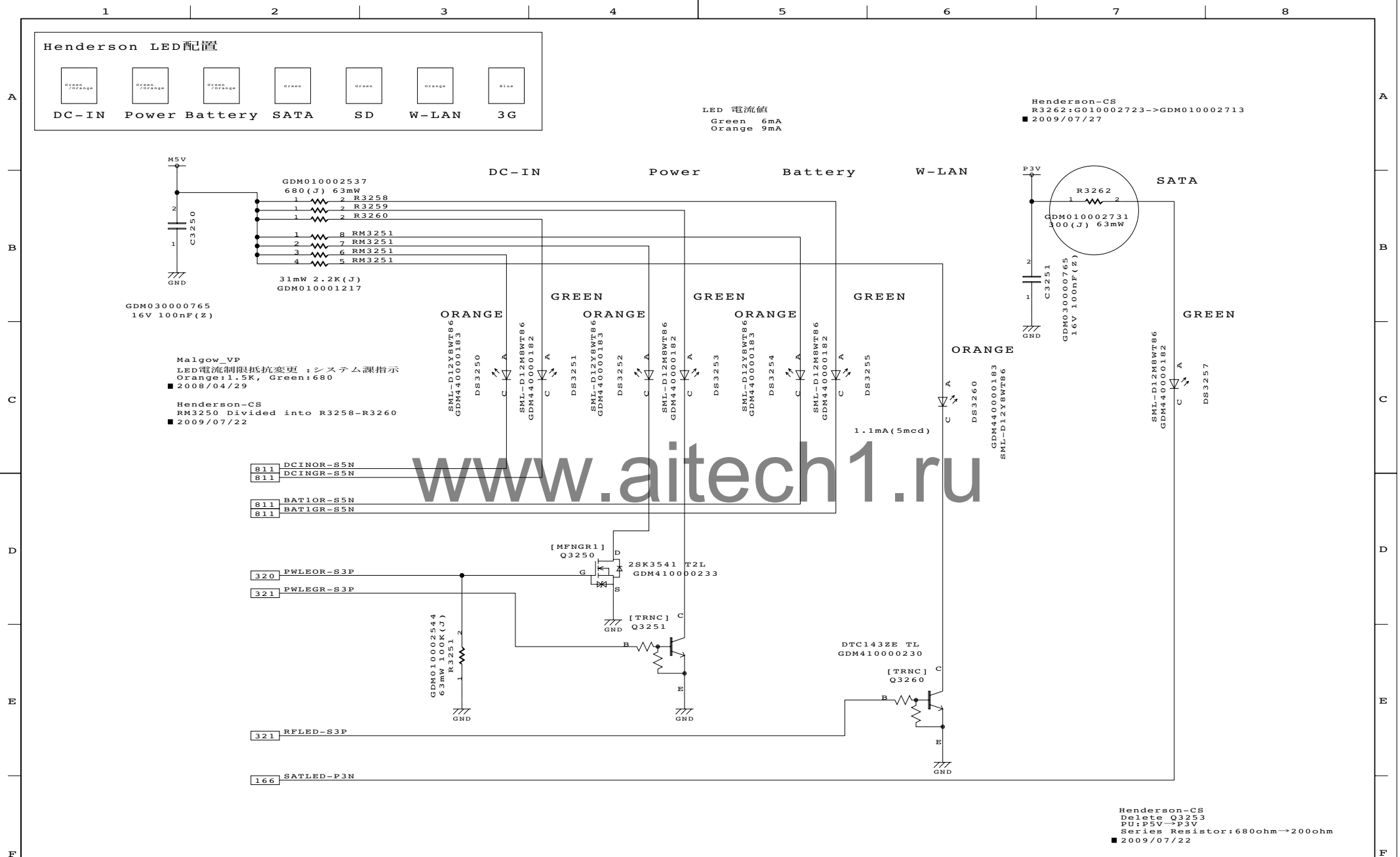












DESIGNED BY

T. Ichimura

TITLE

FHNSY1

FUNCTION

LED

SH.NO.

325

PAGE NO.

067

REV.MARK

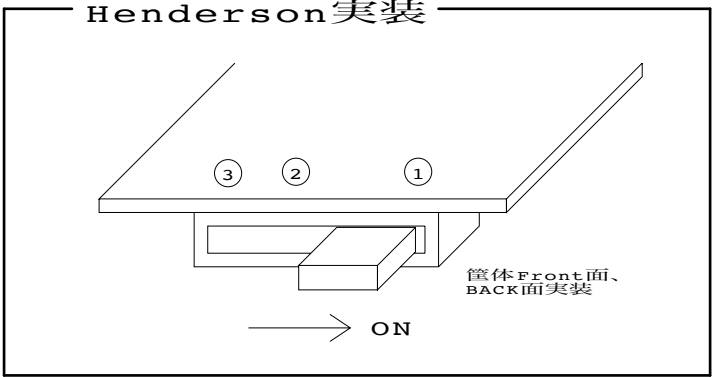
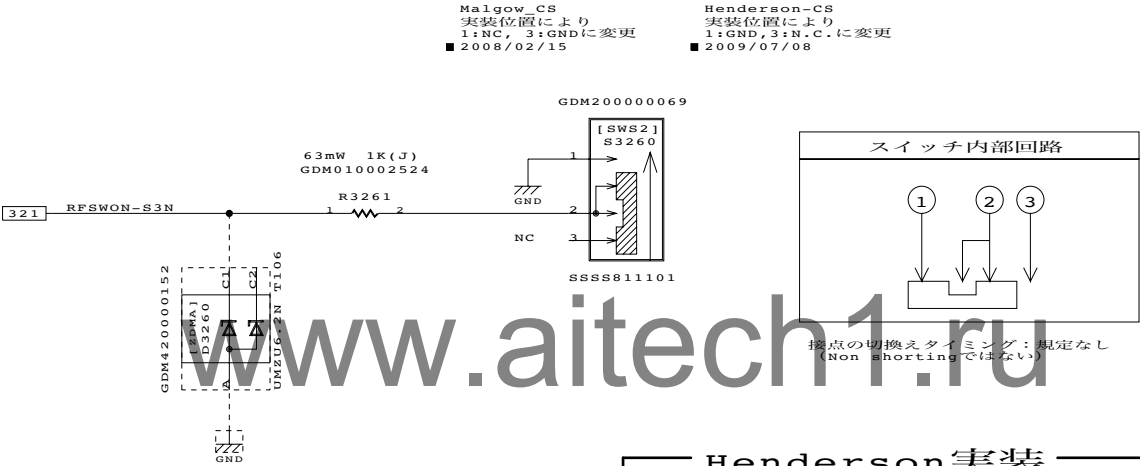
00

DRAWING.NO.

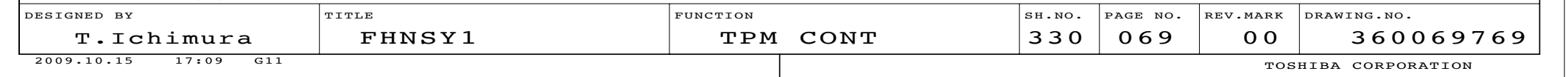
360069769

2009.10.15 17:09

TOSHIBA CORPORATION



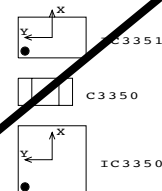




## 仕向け設定有

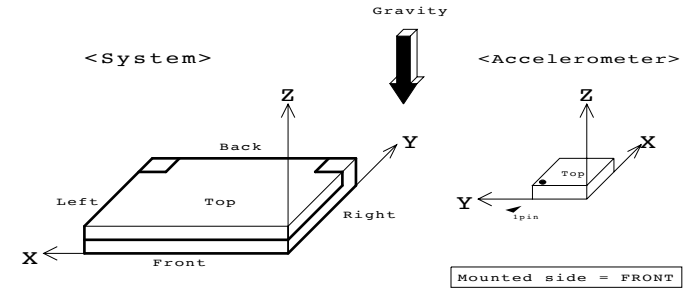
Place FRONT side  
Spot and direction of accelerometer depend on (1P-SETSUS8)  
Don't place nearby exothermic parts for avoid thermal drift  
FRONT面に実装。  
配置する場所／向きは (1P設8) 指示に従うこと。  
温度ドリフトしやすい部品なので、発熱部品の近くへ配置しないこと。

Place them like follow drawing  
図のように配置



## 静的加速度の座標軸

Wegenen20 2008/03/20



Malgow-DDR3\_CS  
Kionixを削除し、 FreescaleをSH.336に追加  
■ 2009/01/30

Malgow-Andalusia\_CS  
加速度センサ判別信号追加  
L:STMicro  
H:Kionix  
■ 2008/04/12

Malgow-Andalusia\_CS  
AXIS-GND→GNDに変更  
■ 2008/03/31

Henderson-CS  
加速度センサ Delete.  
■ 2009/07/08

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ACCEL[X,Y,Z]-SXPは、 EC/KBC側のシートに  
コンデンサを設置すること

CAUTION (Circuit)  
ACCEL[X,Y,Z]-SXP must have  
capacitors near by EC/KBC (SH.32x).  
Value of capacitors  
(depend on accelerometer)  
100nF(K) at Kionix products  
(Rout=32Kohms)  
33nF(K) at STMicroelectronics products  
(Rout=110Kohms)

Malgow-DDR3\_CS  
IC3350:GDM470001458に変更  
■ 2009/01/27

EC/KBCのVREFピンまでを  
できるだけ最短に！

809 804 811 S3V  
2  
6.3V 10uF(K)  
GDM030000748  
1  
\*C3350  
PD(Power Down)  
0: normal mode  
1: Power-Down mode  
FS(Full Scale selection)  
0: 2g Full-scale  
1: 6g Full-scale  
ST(Self Test)  
0: normal mode  
1: Self-test

PD, STは内部プルダウンされていないので、  
レベル不定状態が発生しないように  
外部でプルアップ/ダウンすること

261 310 115 144 322 336 GND  
(EC/KBCのAVSSピンまでを  
できるだけ最短に！)  
(AXIS-GND)

Henderson-VP  
アナログ GND分離用ジャンパ削除による信号名変更  
■ 2009/10/15

■ REF:MCP79-TS(FNTBS0)

DESIGNED BY

H.Nishioka/T.Ichimura

TITLE

FHNSY1

FUNCTION

ACCELEROMETER (FRONT)

SH.NO.

335

PAGE NO.

070

REV.MARK

00

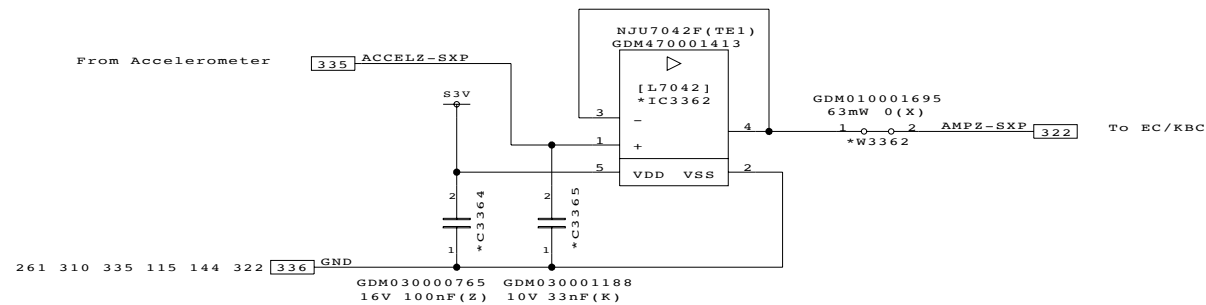
DRAWING.NO.

360069769

2009.10.15 17:09 G11

TOSHIBA CONFIDENTIAL

TOSHIBA CORPORATION



TOSHIBA CORPORATION

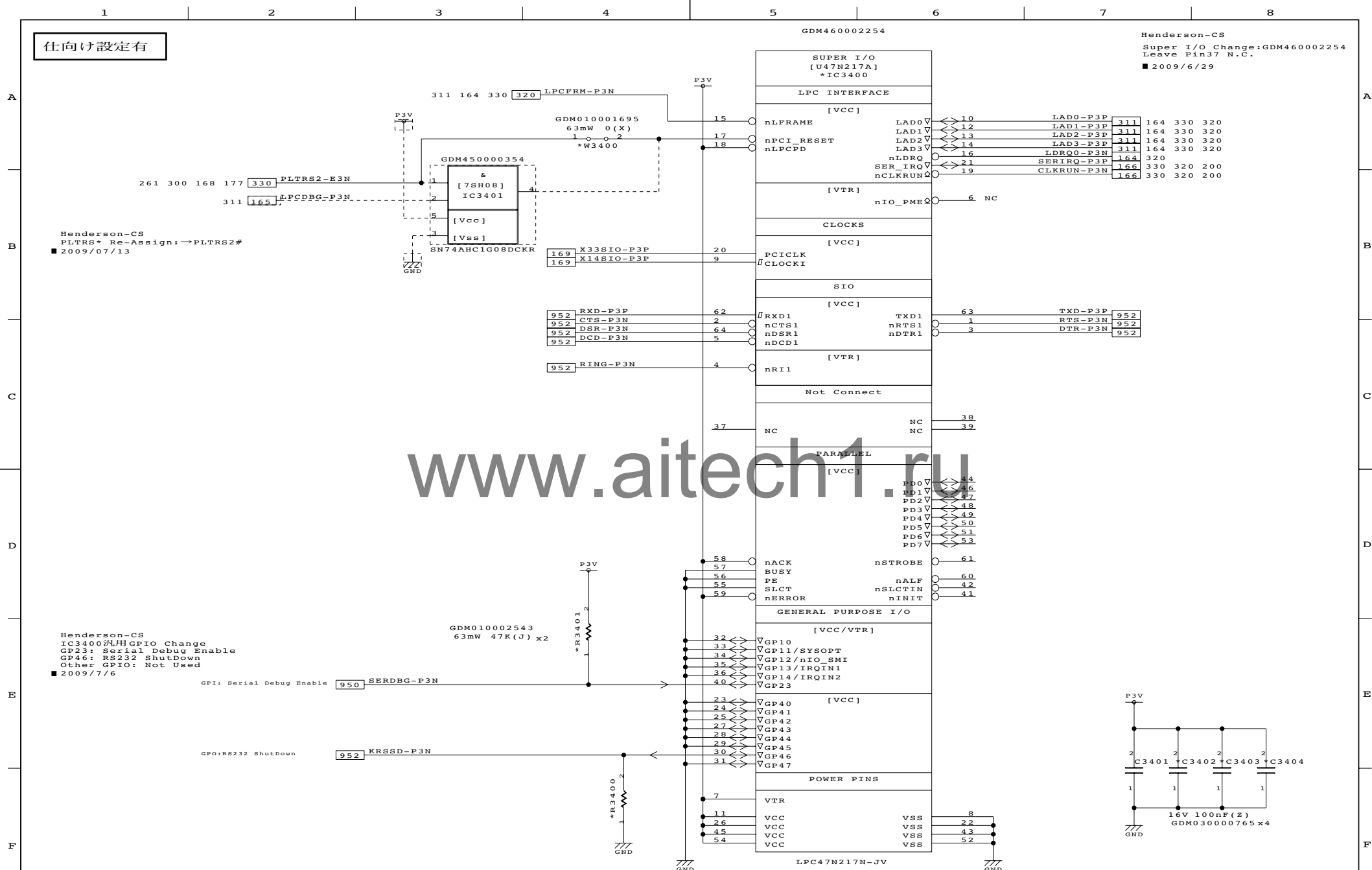
F



FPWM	3.3V	5.0V
R8771	6.8k(D)	10k(D)
R8772	22k(D)	10k(D)

	AMTサポート	AMT非サポート
Group		
W3380	Mount	Not Mount
W3381	Not Mount	Mount

TOSHIBA CORPORATION



DESIGNED BY

T. Ichimura/L.Yu

2009.10.15 17:09

TITLE

FHNSY1

FUNCTION

SUPER I/O

SH.NO.

340

PAGE NO.

073

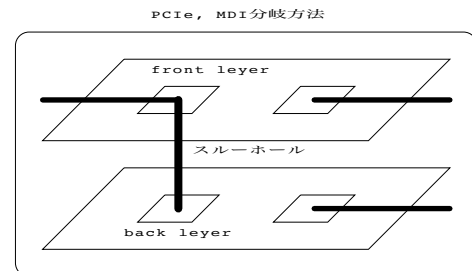
REV.MARK

00

DRAWING.NO.

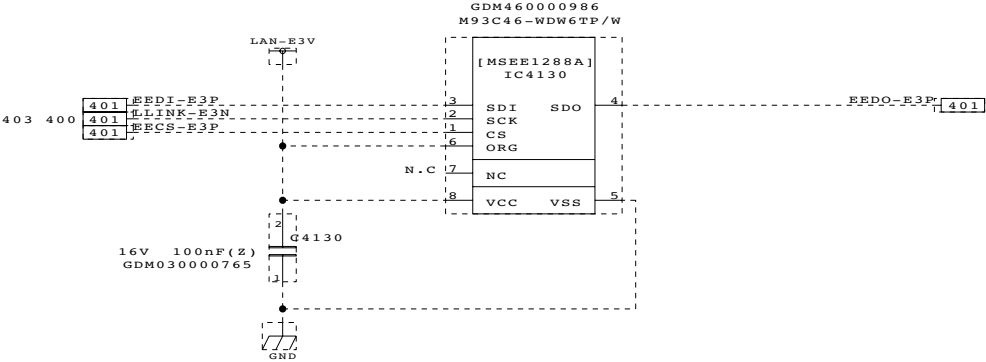
360069769

TOSHIBA CORPORATION



レイアウトについては Calpella Platform Design Guideを参照して下さい。





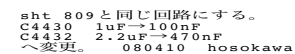
www.aitech1.ru

レイアウトについては REALTEK Layout Guideを  
参照して下さい。

DESIGNED BY	2009/10/15	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
K.Horibe		FHNSY1	LAN EEPROM(8103EL)	402	076	00	360069769
2009.10.15	17:09						TOSHIBA CORPORATION



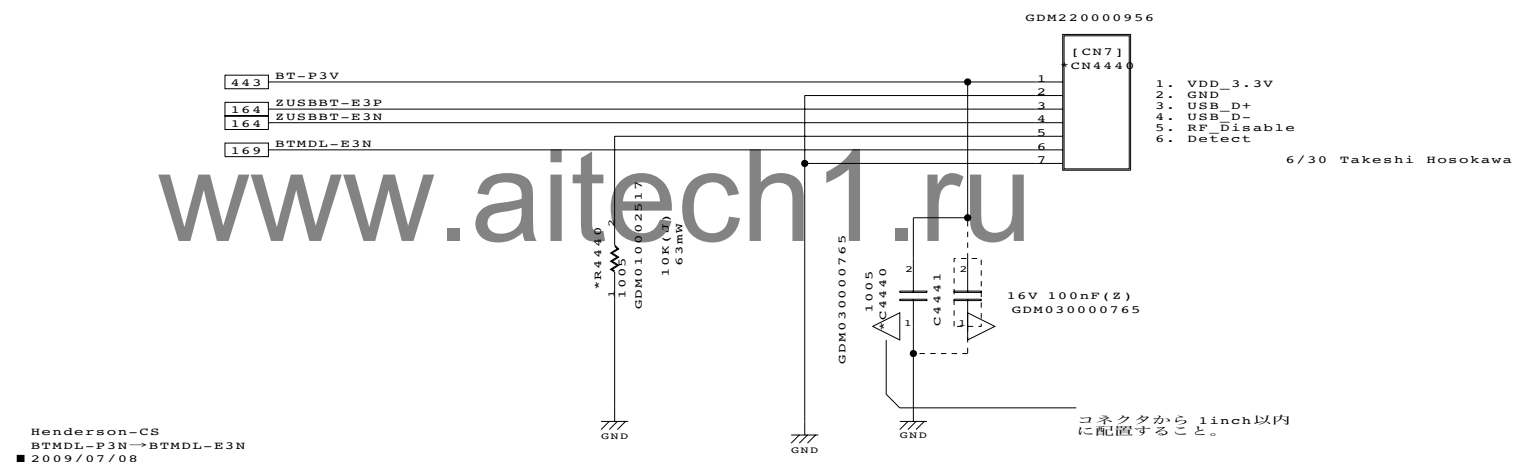
E



■ REF:Moldau2/Sierral0(VP) . FMTSY1

2009.10.15 17:09 G11

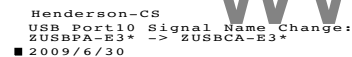
BTMDL #信号	
L	Bluetooth基板あり
H	Bluetooth基板無し





■ REF:Malgow(VP) . FG6IN2

2009.10.15 17:09 G11



2009.10.15 17:09

仕向け設定有

USB Port8 特定Device用 or Dedicated Charger

Henderson USB Charge Circuit Layout Guide

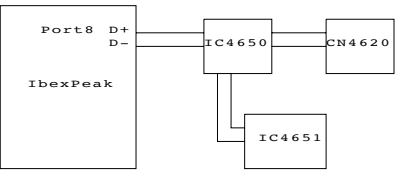
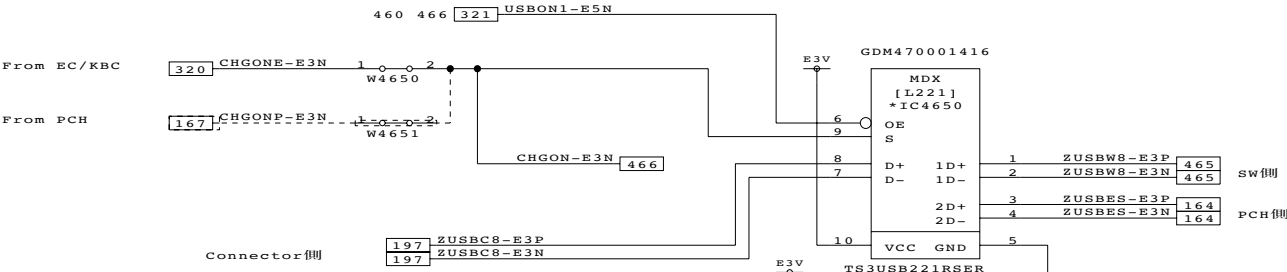
Henderson-CS  
信号名変更:  
USBDC-E3N→CHGONP-E3N  
USBDC-E3N→MOD3EN-E3N  
USB10-E3N→MOD4EN-E3N  
■ 2009/7/29

Henderson-CS  
USB Charger ON信号制御元  
切り替え用ジャンプ追加  
■ 2009/7/29

Cassiopeia10 CS  
Delete W4650,W4651  
■ 2008/08/01

可能ならば USBON0-E3Nに

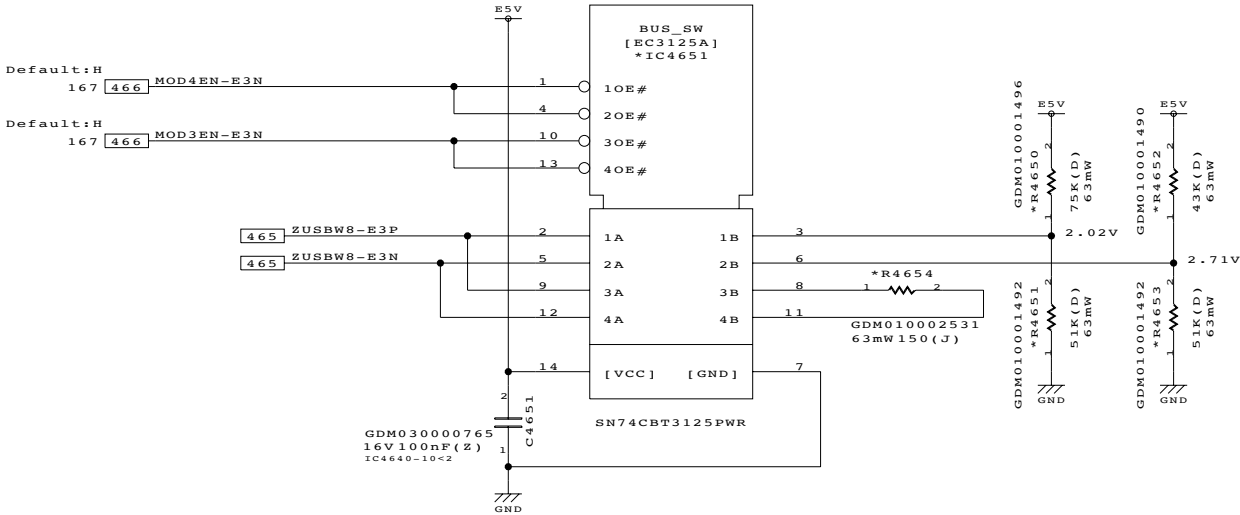
PCH→IC4650: 35mm



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Henderson-CS  
USB Port4 Signal Name Change  
■ 2009/7/3

Cassiopeia10 CS  
USB Port0 Signal Name Change  
■ 2008/07/28



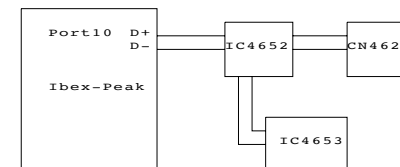
REF:Cassiopeia10(VP) . FCASY1

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
Ling.Yu	FHNSY1	USB CHARGER 3/4(1)	465	082	00	360069769

2009.10.15 17:09

# Henderson USB Charge Circuit Layout Guide

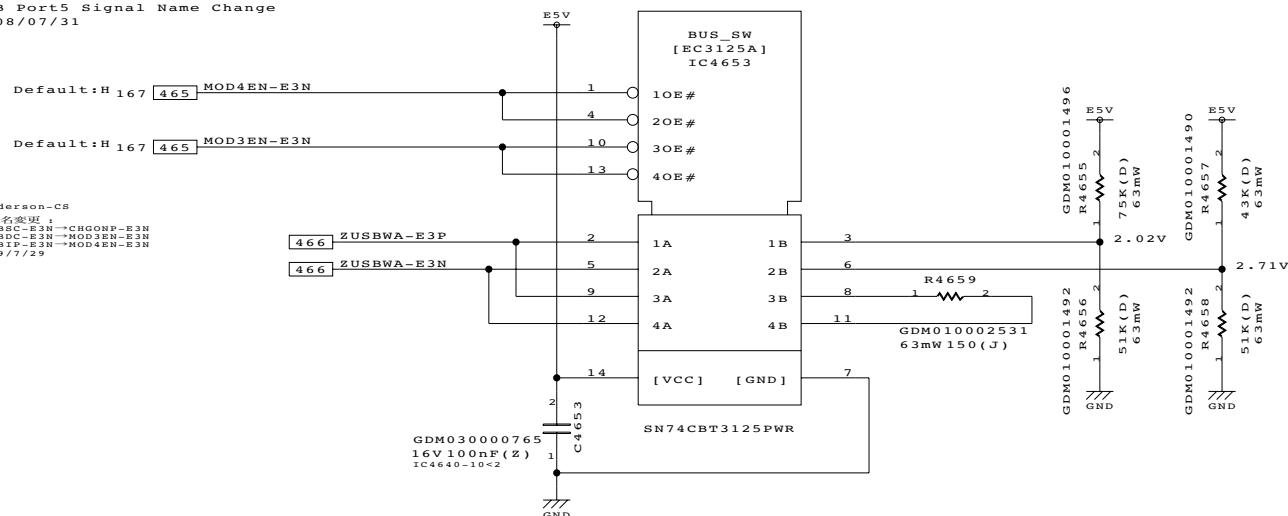
PCH->IC4652: 35mm



S	OE#	Function
X	H	Disconnect
L	L	D=1D
H	L	D=2D

GDM03000  
16V 100nF  
IC4650-10≤2

GDM450000496



Henderson-CS  
信号名变更：  
USBSC-E3N→CHGONP-E3N  
USBDC-E3N→MOD3EN-E3N  
USBIP-E3N→MOD4EN-E3N  
2009/7/29

REF:Cassiopeia10(VP) . FCASY1

DESIGNED BY <b>Ling.Yu</b>	TITLE <b>FHNSY1</b>	FUNCTION <b>USB CHARGER 3/4(2)</b>	SH.NO. <b>466</b>	PAGE NO. <b>083</b>	REV.MARK <b>00</b>	DRAWING.NO. <b>360069769</b>
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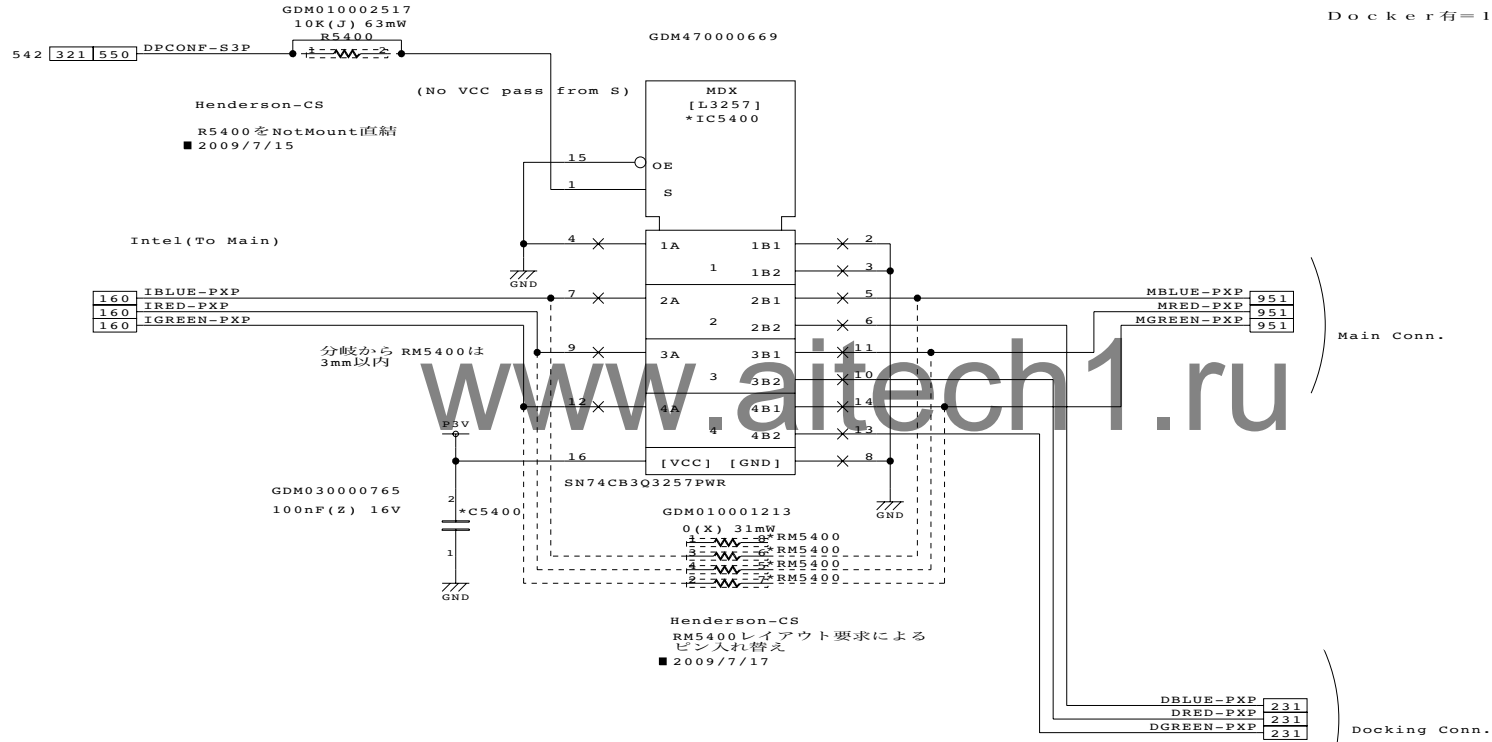




TOSHIBA CORPORATION

仕向け設定有

	Docker	
	Yes	No
RM5400	NotMount	Mount
IC5400	Mount	NotMount
C5400	Mount	NotMount



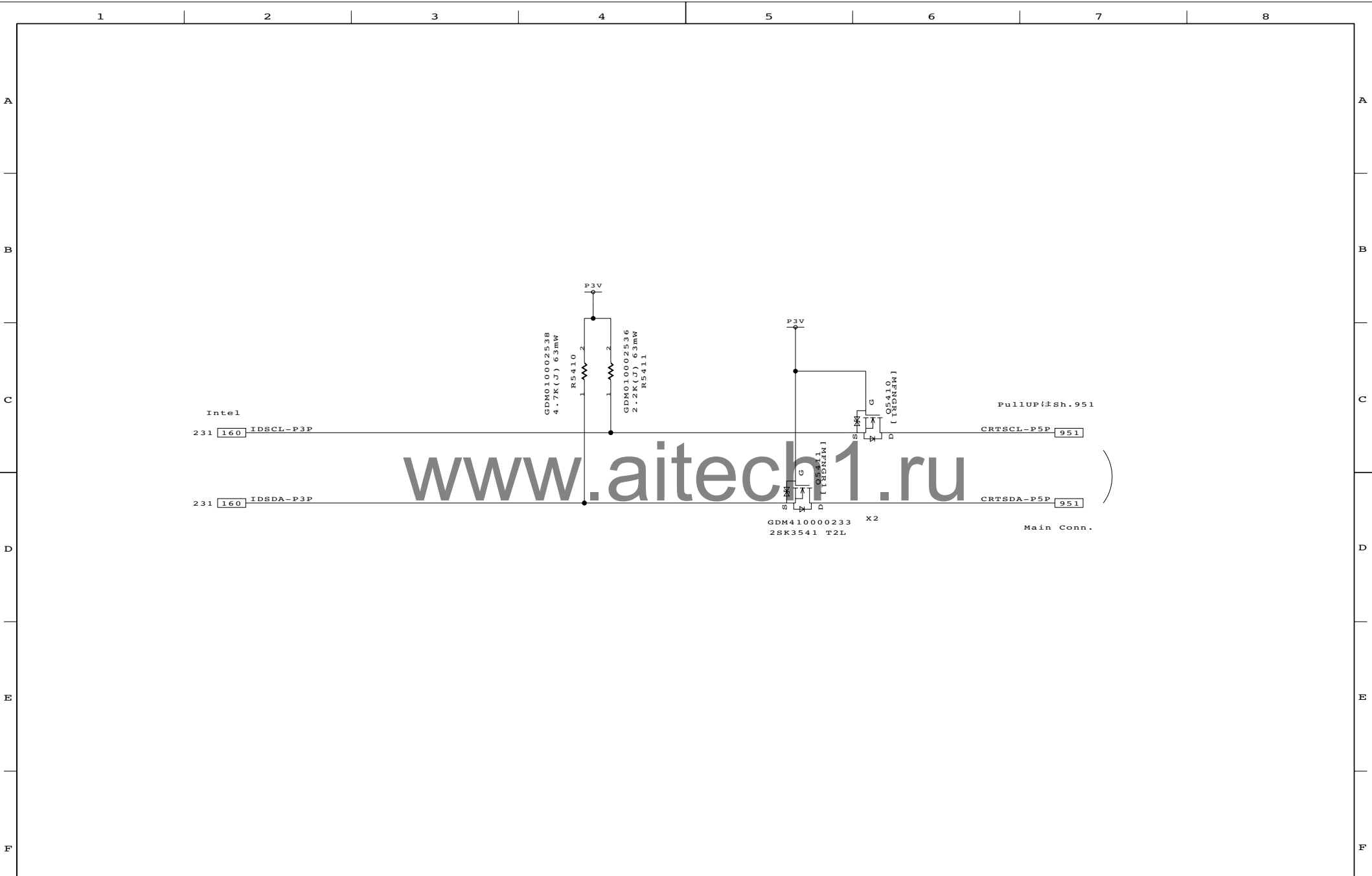
S (DPCONF)	L	H
CB3Q3257 (S1)	ON	OFF
CB3Q3257 (S2)	OFF	ON

TOSHIBA&NVIDIA CONFIDENTIAL

DESIGNED BY <b>T.Naruse</b>	TITLE <b>FHNSY1</b>	FUNCTION <b>CRT RGB</b>	SH.NO. <b>540</b>	PAGE NO. <b>086</b>	REV.MARK <b>00</b>	DRAWING.NO. <b>360069769</b>
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2009.10.15 17:09 G11

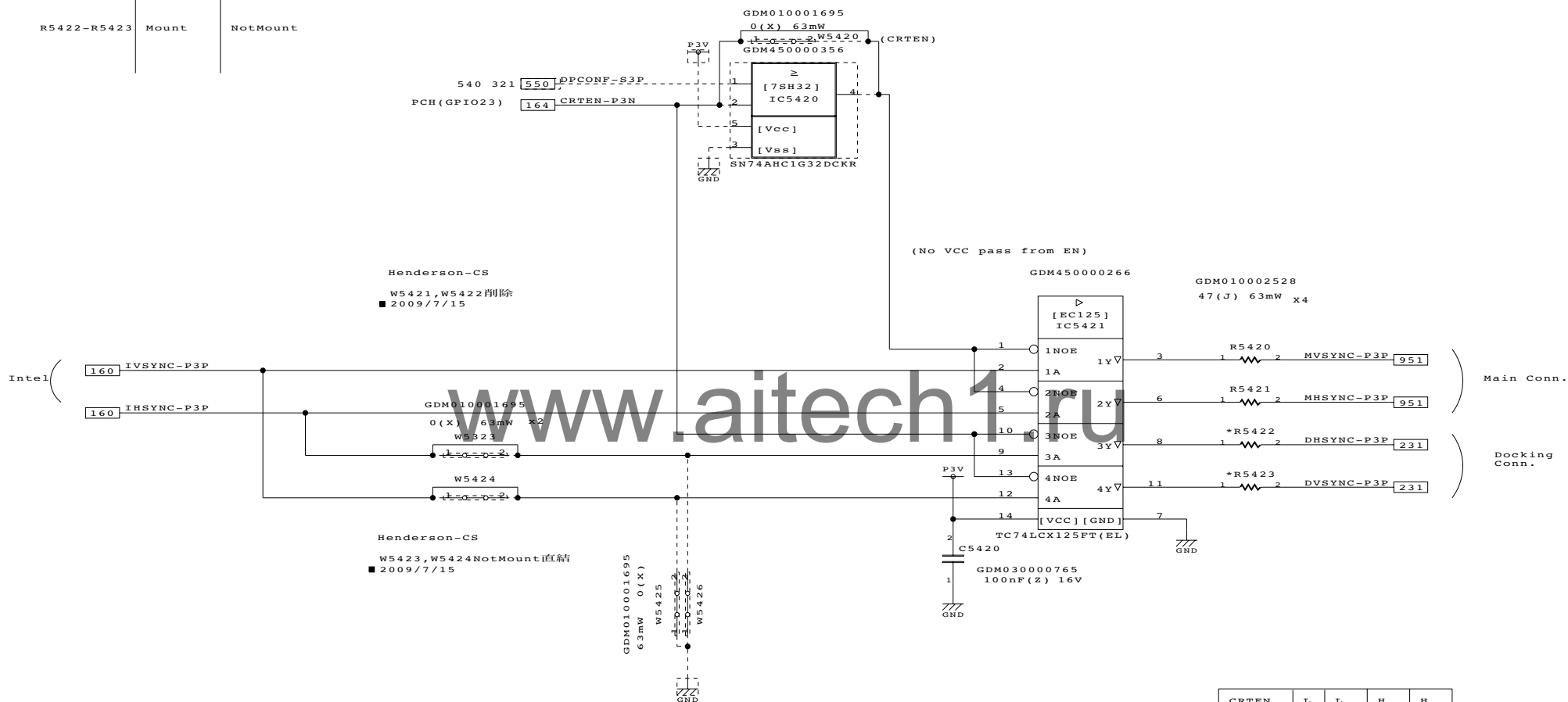
TOSHIBA CORPORATION



DESIGNED BY <b>T.Naruse</b>	TITLE <b>FHNSY1</b>	FUNCTION <b>CRT DDC</b>	SH.NO. <b>541</b>	PAGE NO. <b>087</b>	REV.MARK <b>00</b>	DRAWING.NO. <b>360069769</b>
2009.10.15	17:09	G11	TOSHIBA CORPORATION			

## 仕向け設定有

	Docker	
	Yes	No
R5422-R5423	Mount	NotMount



CRTEN	L	L	H	H
DPCNF	L	H	L	H
Main	ON	OFF	OFF	OFF
Docking	ON	ON	OFF	OFF

DESIGNED BY

T.Naruse

TITLE

FHNSY1

FUNCTION

CRT H/VSync

SH.NO.

542

PAGE NO.

088

REV.MARK

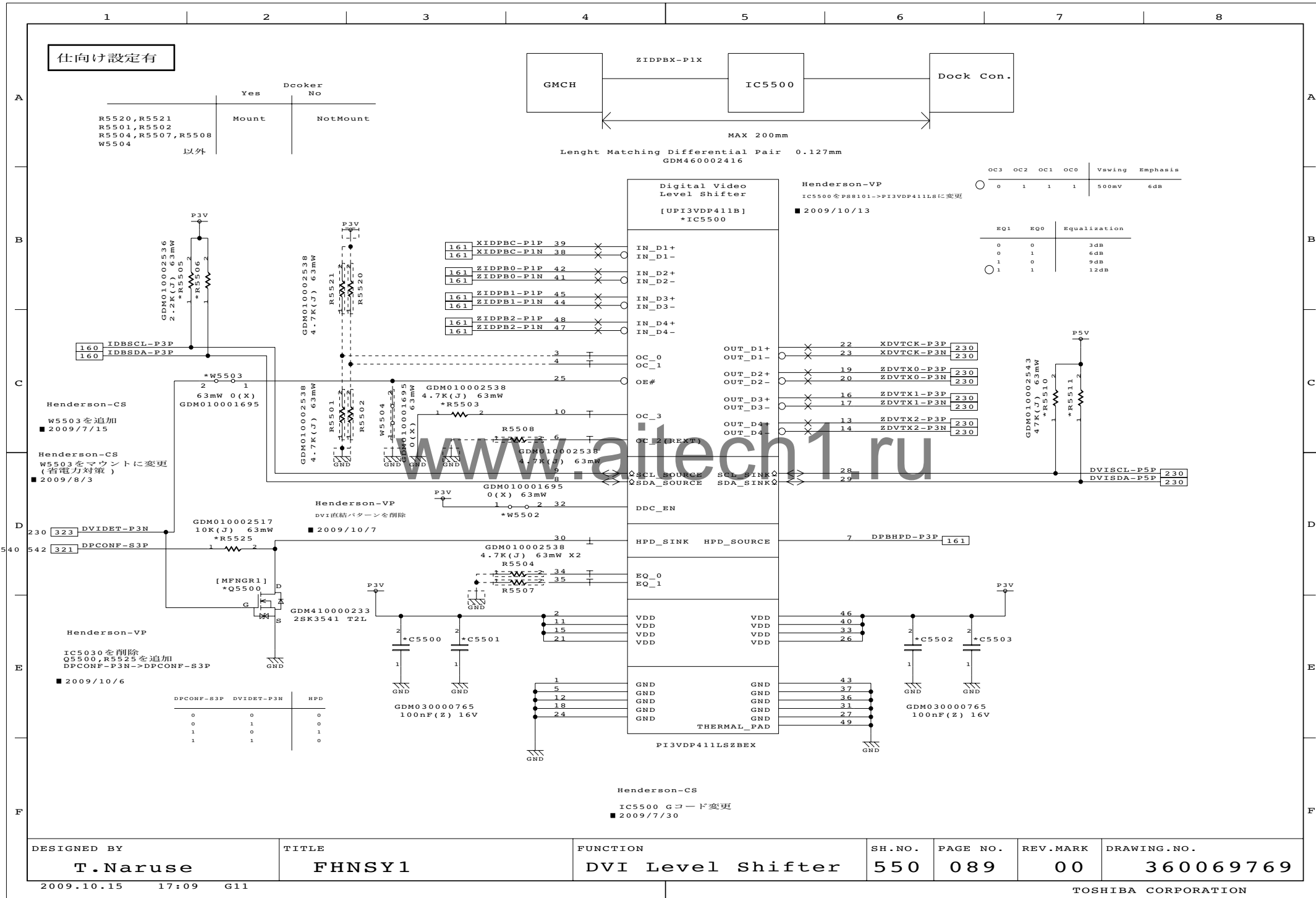
00

DRAWING.NO.

360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION



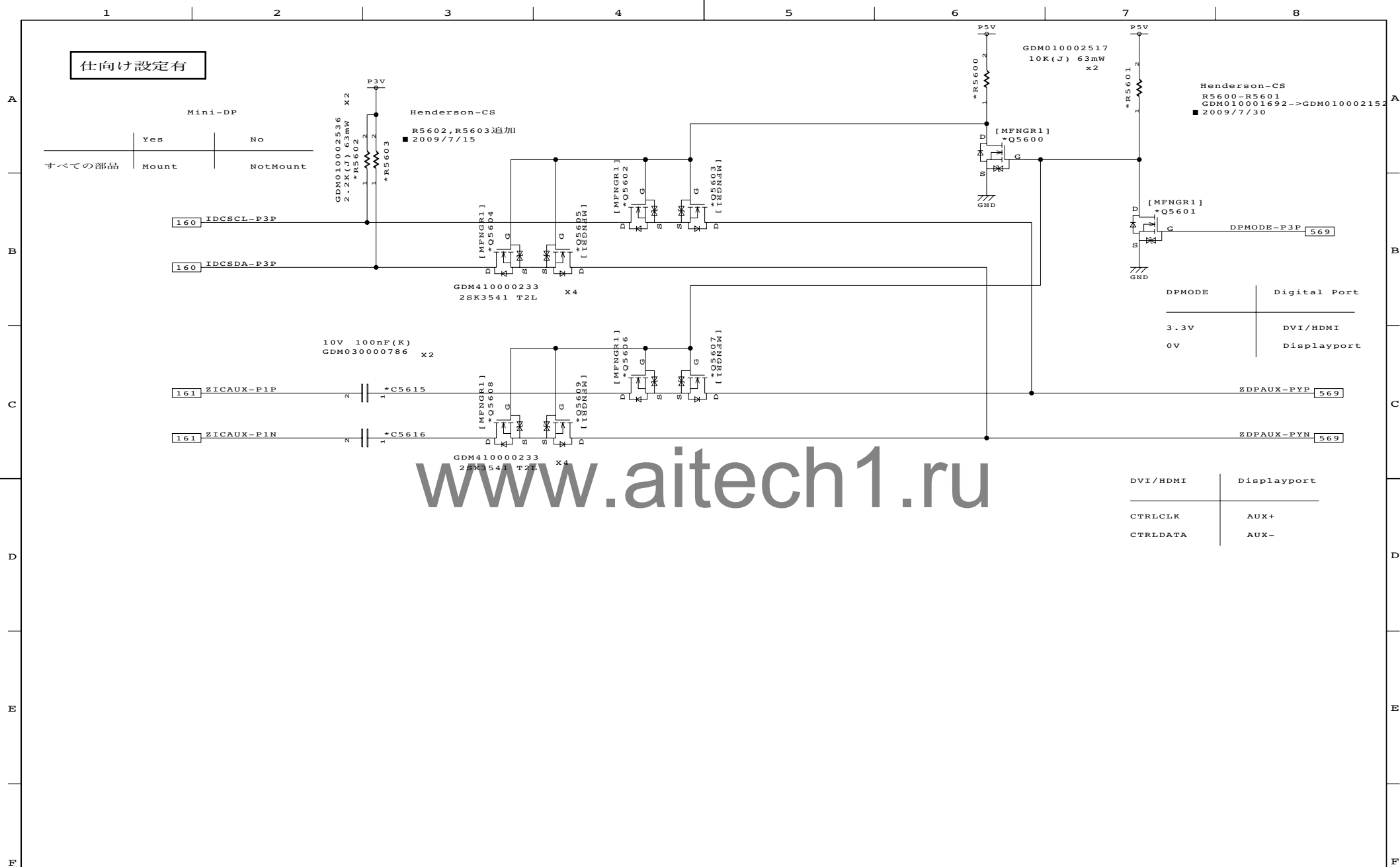
1	2	3	4	5	6	7	8
A							A
B							B
C							C
D							D
E							E
F							F

Henderson-VP

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DVI直結パターンを削除  
■ 2009/10/7

DESIGNED BY T.Naruse	TITLE FHNSY1	FUNCTION DVI Jumper	SH.NO. 551	PAGE NO. 090	REV.MARK 00	DRAWING.NO. 360069769
2009.10.15	17:09	G11	TOSHIBA CORPORATION			



DESIGNED BY

T.Naruse

TITLE

FHNSY1

FUNCTION

Displayport Dongle

SH.NO.

560

PAGE NO.

091

REV.MARK

00

DRAWING.NO.

360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION

## 仕向け設定有

## Mini-DP

D5690以外  
R5699, R5700  
Q5690, Q5691

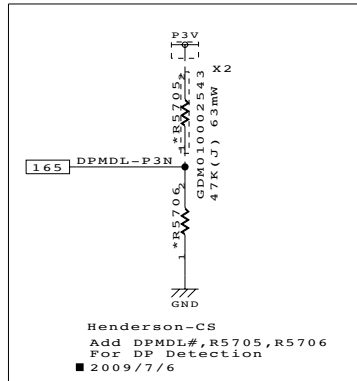
Mount

NotMount

R5705  
R5706

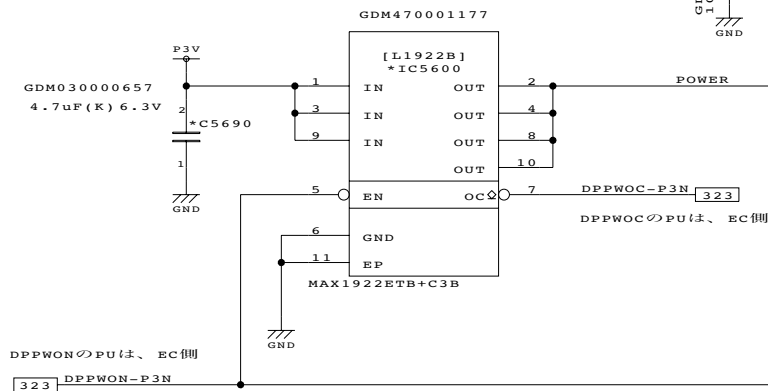
NotMount  
Mount

Mount  
NotMount



Henderson-VP  
DP\_PWR回路変更  
■ 2009/10/06

Henderson-VP  
DP\_PWR回路変更  
■ 2009/09/24



161 ZDPTX0-P1P  
161 ZDPTX0-P1N

161 ZDPTX1-P1P  
161 ZDPTX1-P1N

161 ZDPTX2-P1P  
161 ZDPTX2-P1N

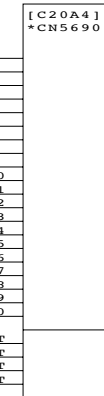
161 ZDPTX3-P1P  
161 ZDPTX3-P1N

\*R5698  
GDM010002530  
100 (J) 63mW

Henderson-CS  
R5698追加  
■ 2009/7/15

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GDM220002196



1 GND  
2 HPD  
3 ML\_LANE0+  
4 DP\_MODE  
5 ML\_LANE0-  
6 CEC  
7 GND  
8 GND  
9 ML\_LANE1+  
10 ML\_LANE3+  
11 ML\_LANE1-  
12 ML\_LANE3-  
13 GND  
14 GND  
15 ML\_LANE2+  
16 AUX\_CH+  
17 ML\_LANE2-  
18 AUX\_CH-  
19 GND  
20 DP\_PWR

3V112M3-RH3TTB-7H

Henderson-CS

K2203168->GDM220002196  
■ 2009/7/24

Henderson-VP  
Diode削除  
■ 2009/09/29

GDM010002534  
\*R5694  
470 (J) 63mW

GDM030001170  
10uF (K) 6.3V

GDM010002524  
1K (J) 63mW

\*R5692

\*R5693

GDM010002526  
470K (J) 63mW

GDM410000233  
S 2SK3541 T2L

[MFNGR1]  
\*Q5693

GDM410000233  
S 2SK3541 T2L

Henderson-CS  
W5690を追加  
■ 2009/7/23

Henderson-CS  
IC5691をシュミットから FETに変更  
■ 2009/7/15

GDM010002517  
10K (J) 63mW x2

Henderson-CS  
R5699, R5700, Q5690, Q5691をNotMount  
■ 2009/7/23

R5699, R5700, Q5690, Q5691をNotMount  
■ 2009/7/23

HPDDPG-S3P GPU  
161 323  
EC

Henderson-CS  
R5694, R5697を削除  
■ 2009/7/16

Henderson-CS  
HPDDPG-P3P->HPDDPG-S3P  
■ 2009/7/23

Henderson-CS  
IC5691をシュミットから FETに変更  
■ 2009/7/15

Henderson-CS  
IC5691をシュミットから FETに変更  
■ 2009/7/15

Henderson-CS  
IC5691をシュミットから FETに変更  
■ 2009/7/15

Henderson-CS  
IC5691をシュミットから FETに変更  
■ 2009/7/15

Henderson-CS  
IC5691をシュミットから FETに変更  
■ 2009/7/15

Henderson-CS  
IC5691をシュミットから FETに変更  
■ 2009/7/15

DESIGNED BY

M.Endo/T.Naruse

TITLE

FHNSY1

FUNCTION

Displayport I/F 569

SH.NO.

092

PAGE NO.

00

REV.MARK

360069769

DRAWING.NO.

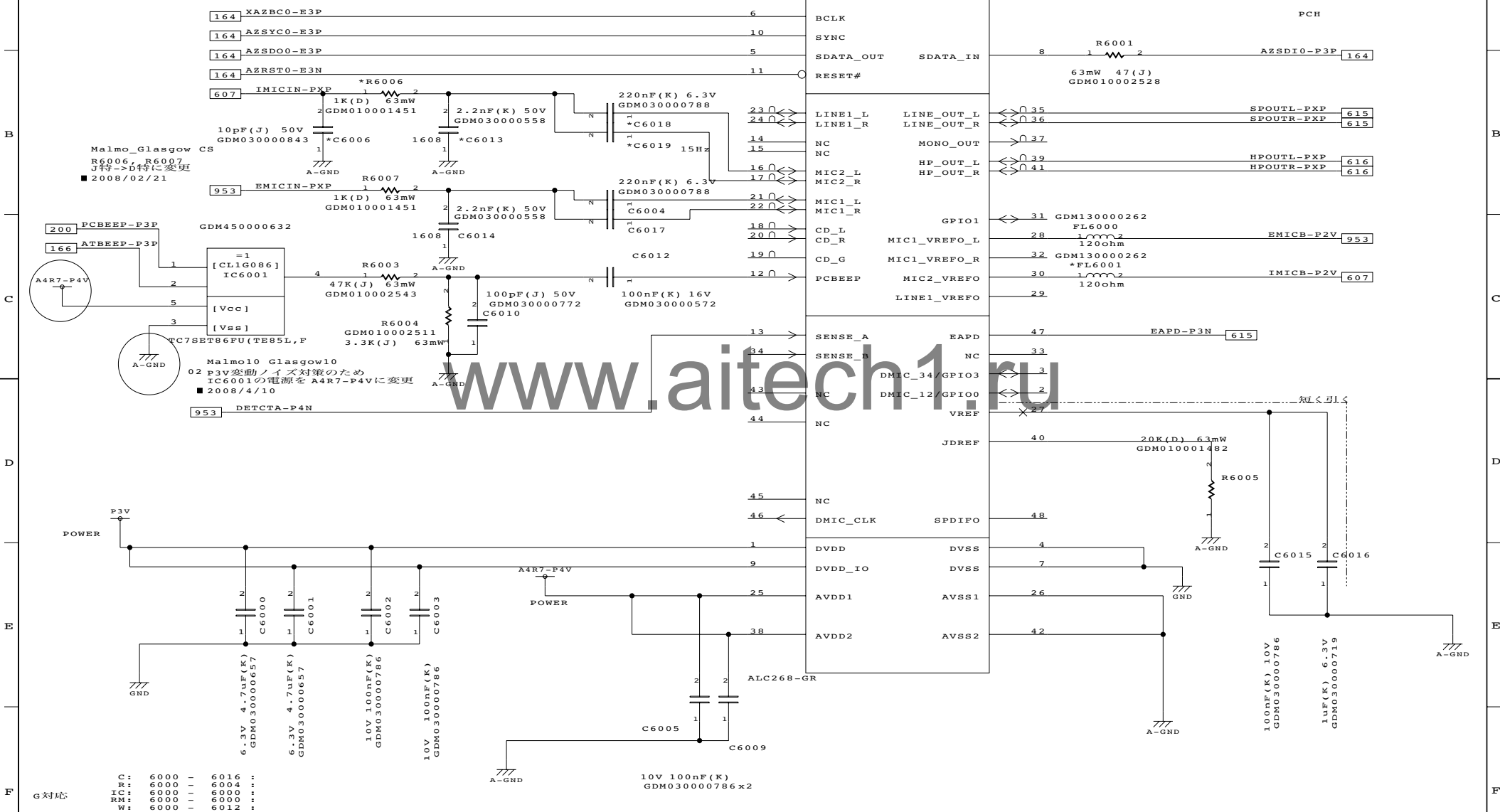
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2009.10.15 17:09 G11

TOSHIBA CORPORATION



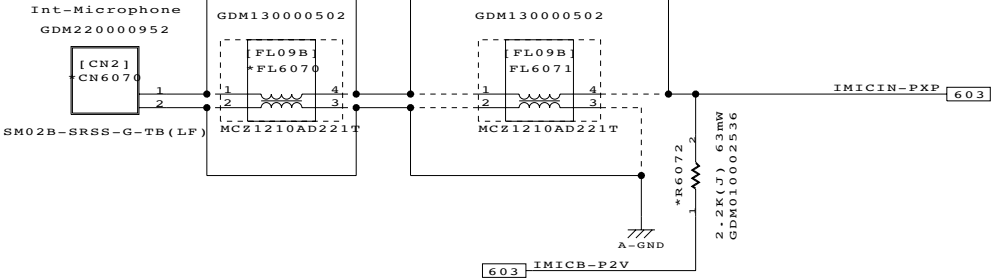
Malmol10 Glasgow10  
 マイク入力の周波数特性変更  
 03 WLP3.0要件マージン不足のため  
 C6013, C6014 5.6nF -> 2.2nF  
 ■ 2008/4/10



DRAWING . NO .

3 6 0 0 6 9 7 6 9

仕向け設定有



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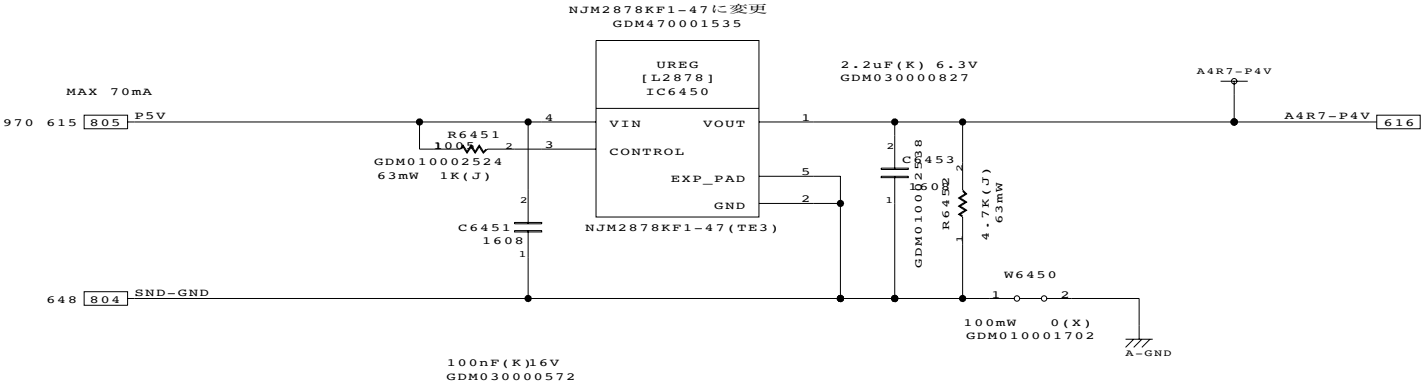
FL: 6050 - 6050 :  
C: 6050 - 6052 :  
R: 6050 - 6053 :  
IC: 6050 - 6050 :  
W: 6050 - 6050 :  
PJ: 6050 - 6051 :

REV.01 鉛フリー済み

DESIGNED BY <b>M.Yamaguchi</b>	TITLE <b>FHNSY1</b>	FUNCTION <b>Int-MIC</b>	SH.NO. <b>607</b>	PAGE NO. <b>094</b>	REV.MARK <b>00</b>	DRAWING.NO. <b>360069769</b>
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TOSHIBA CORPORATION



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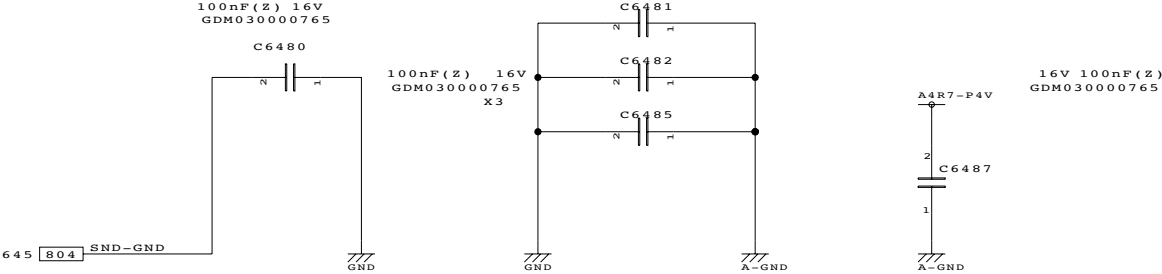
W: 6450 - 6450 :  
C: 6451 - 6453 :  
R: 6450 - 6451 :  
IC: 6450 - 6450 :

REV.01 G対応済み

DESIGNED BY M.Yamaguchi	TITLE FHNSY1	FUNCTION ANALOG POWER	SH.NO. 645	PAGE NO. 097	REV.MARK 00	DRAWING.NO. 360069769
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Henderson-CS  
リファレンス変更 : C6483→C6481、C6484→C6482 (重複)  
■ 2009/08/04



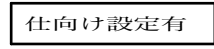
C: 6480 - 6490 :

REV.01 G対応済み

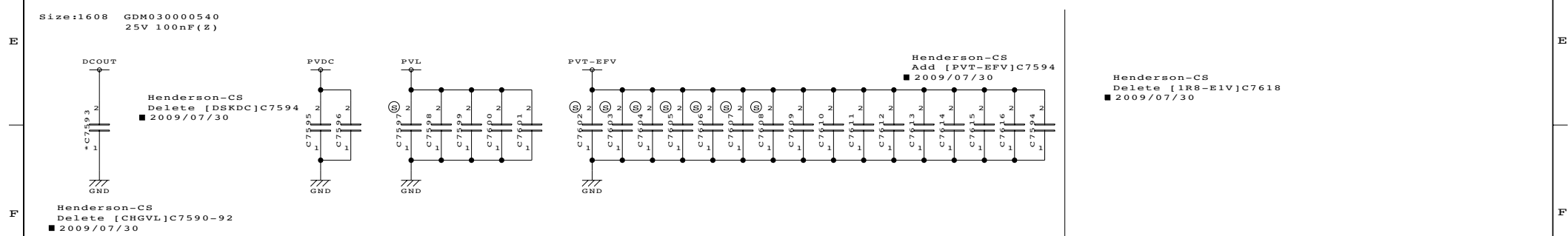
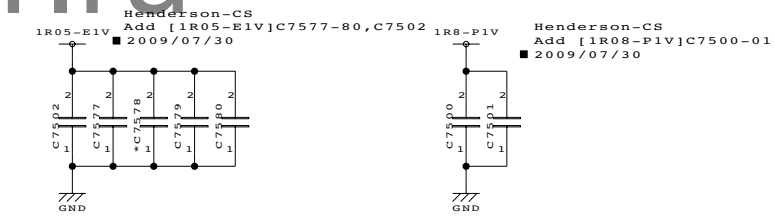
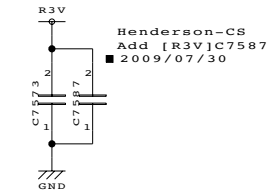
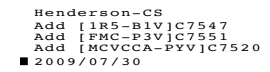
DESIGNED BY M.Yamaguchi	TITLE FHNSY1	FUNCTION Pass-con	SH.NO. 648	PAGE NO. 098	REV.MARK 00	DRAWING.NO. 360069769
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$$R_{ON} : \text{MAX } 5 \text{ m}\Omega$$


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	GM/GL	PM
C7535-C7538	GDM030000765 100nF	GDM010001695 0ohm



DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura	FHNSY1	EMI CAP.	750	100	00	360069769
2009.10.15	17:09	G11	TOSHIBA CORPORATION			



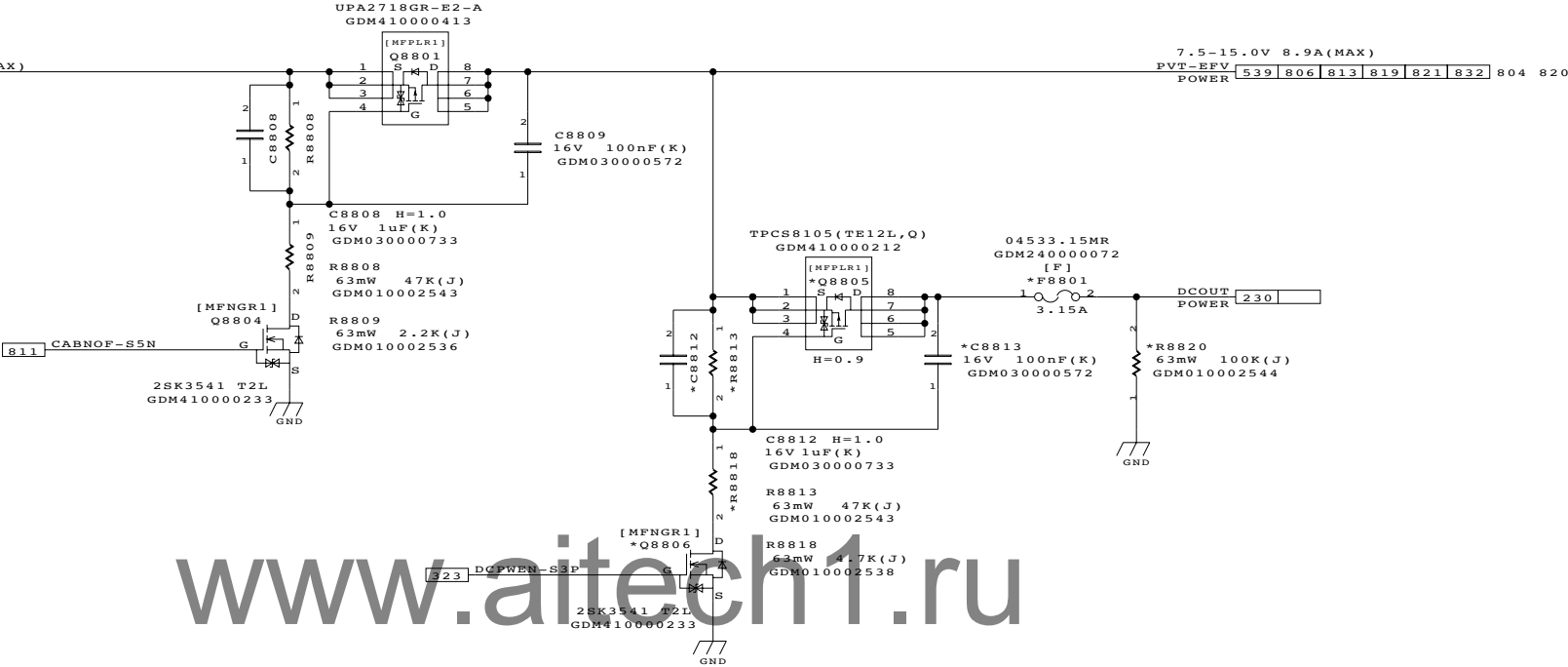


～チェック・ポイント～

- ☐ 逆流防止ダイオード , ヒューズの定格
- ☐ 引き抜き抵抗の定格、容量
- ☐ 電波、ハルネス等で発生する、パルスコン
- ☐ ドッキング入力回路、出力回路
- ☐ バッテリー入力回路

DRAWING . NO .
360069769

仕向け設定あり



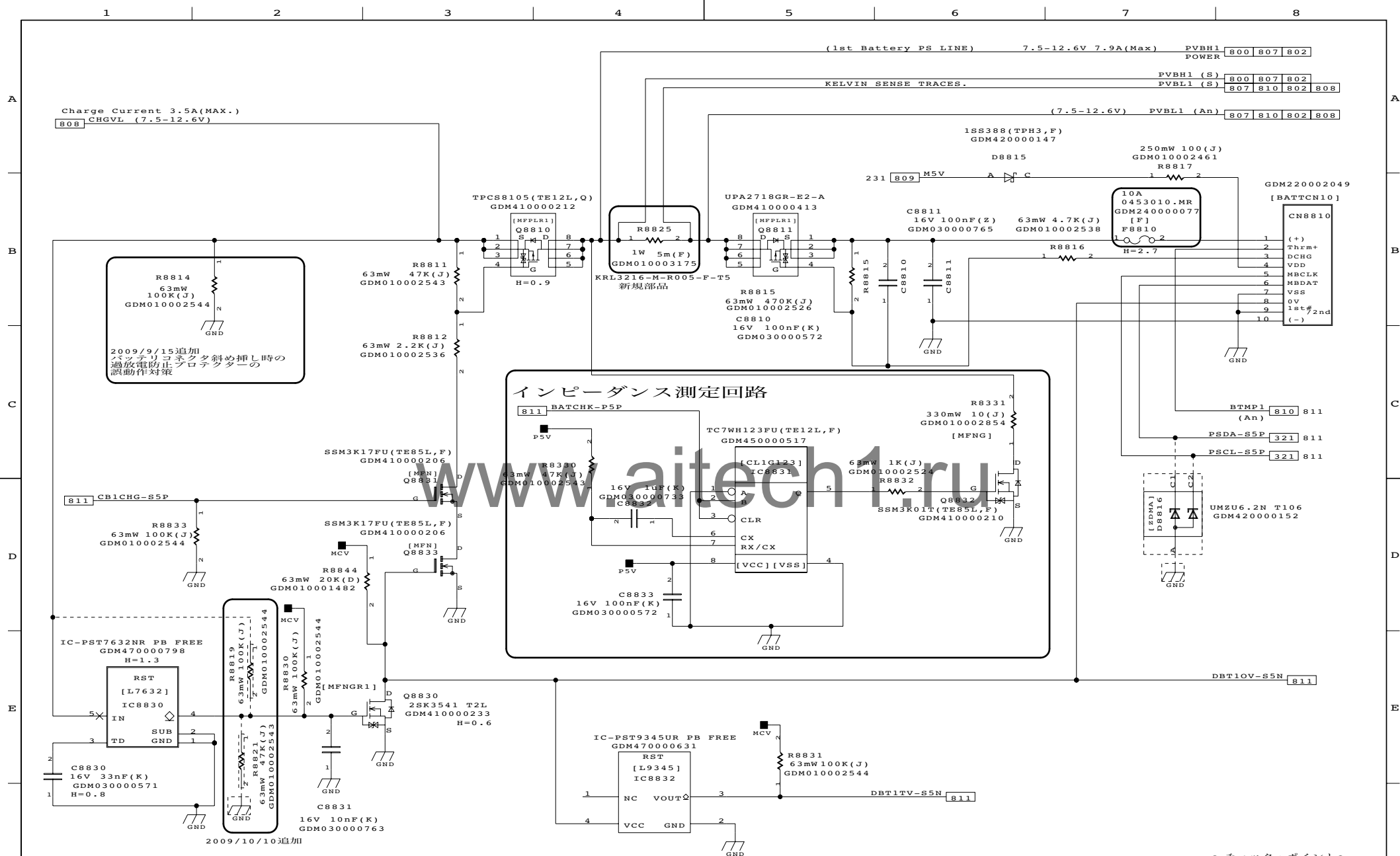
www.aitech1.ru

仕向け設定

Group	Dockerサポート	Docker非サポート
C8812,C8813,F8801,Q8805 Q8806,R8813,R8818,R8820	Mount	Not Mount

- ～チェック～
- ☐ 部品定格
  - ☐ FET
  - ☐ ドッキング出力回路

DESIGNED BY Y.Horie	TITLE FHNSY1	FUNCTION [ PS ] PVT-SW	SH.NO. 801	PAGE NO. 102	REV.MARK 00	DRAWING.NO. 360069769
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DESIGNED BY 2009/10/10

Y.Horie

TITLE

FHNSY1

FUNCTION

[PS]1st Battery

SH.NO.

802

PAGE NO.

103

REV.MARK

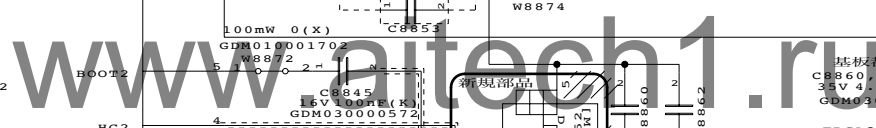
00

DRAWING.NO.

360069769

2009.10.15 17:09 G11

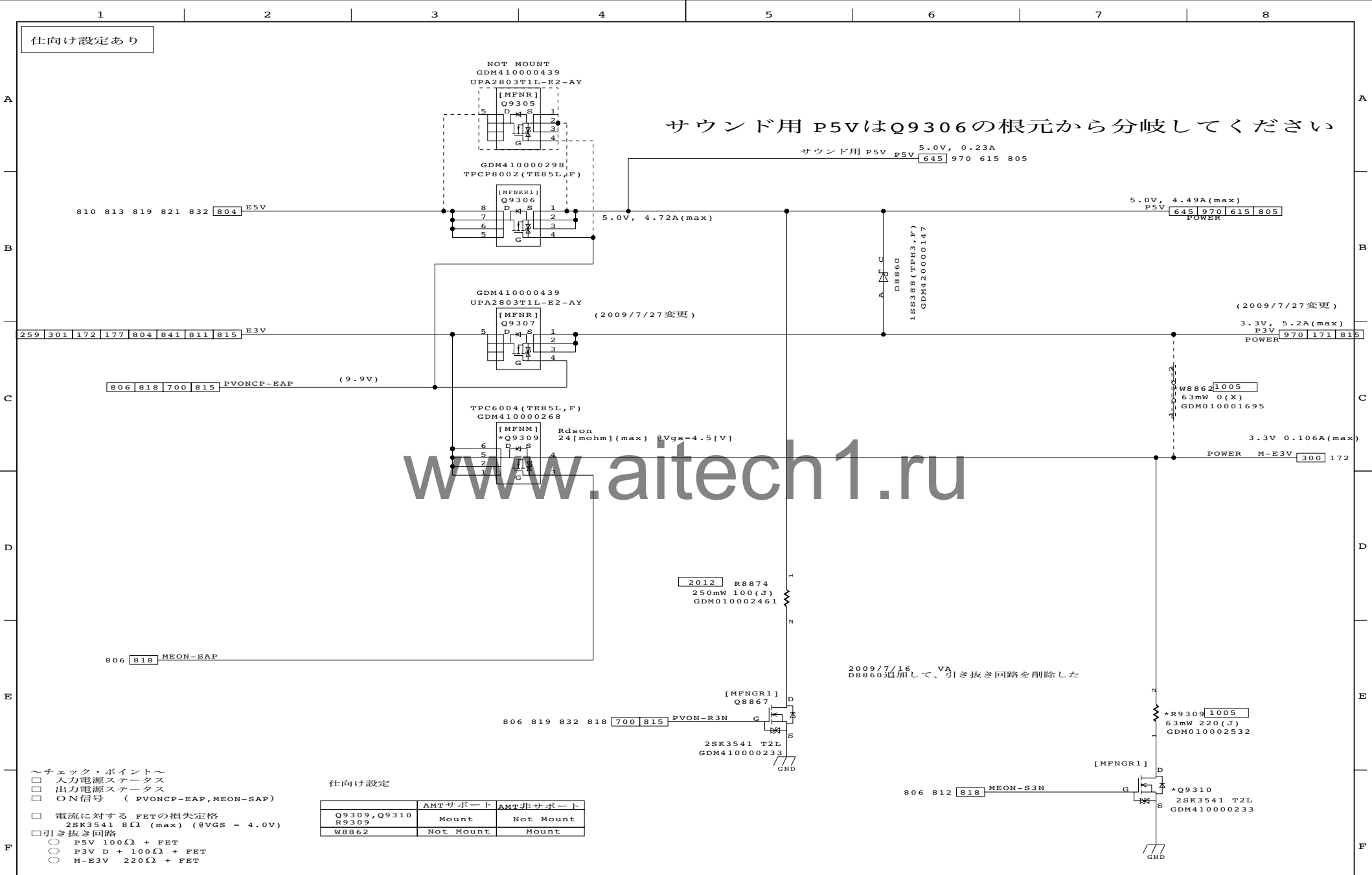
TOSHIBA CORPORATION



ILIMIT	7.65A
I Ripple	1.9A
V Ripple	66.5mV

**E3V**

ILIMIT	14.36A
I Ripple	3.34A
V Ripple	50.1mV

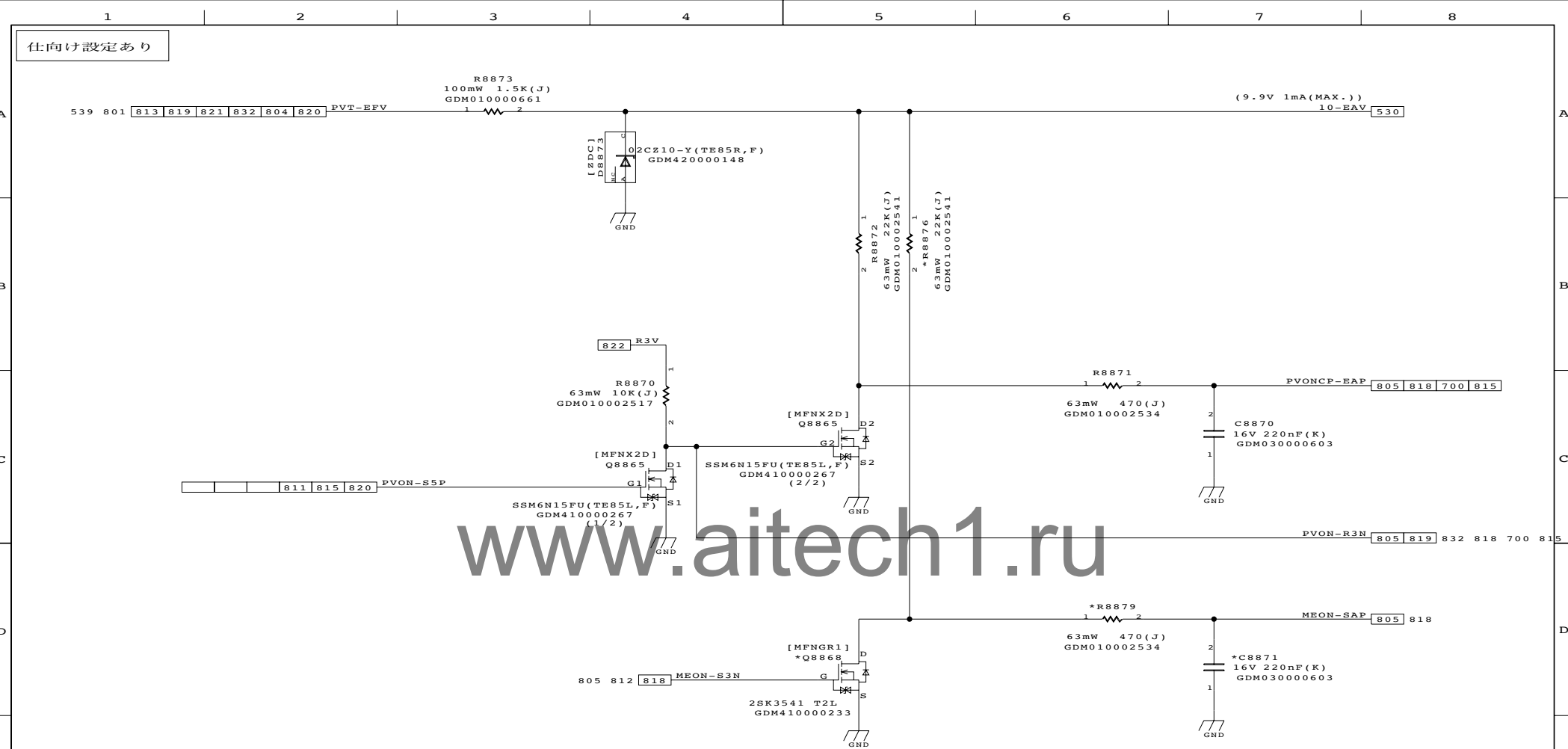


- ～チェック・ポイント～
- ☐ 入力電源ステータス
  - ☐ 出力電源ステータス
  - ☐ ON信号 ( PVONCP-EAP, MEON-SAP)
  - ☐ 電流に対する FETの損失定格  
2SK3541 8Ω (max) ( @VGS = 4.0V)
  - ☐ 引き抜き回路
    - ☐ P5V 100Ω + FET
    - ☐ P3V D + 100Ω + FET
    - ☐ M-E3V 220Ω + FET

仕向け設定

	AMTサポート	AMT非サポート
Q9309, Q9310	Mount	Not Mount
R9309	Mount	Not Mount
W8862	Not Mount	Mount

DESIGNED BY 2009/7/27 <b>Y.Horie</b>	TITLE <b>FHNSY1</b>	FUNCTION <b>[ PS ] B*V/P*V</b>	SH.NO. <b>805</b>	PAGE NO. <b>105</b>	REV.MARK <b>00</b>	DRAWING.NO. <b>360069769</b>
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仕向け設定

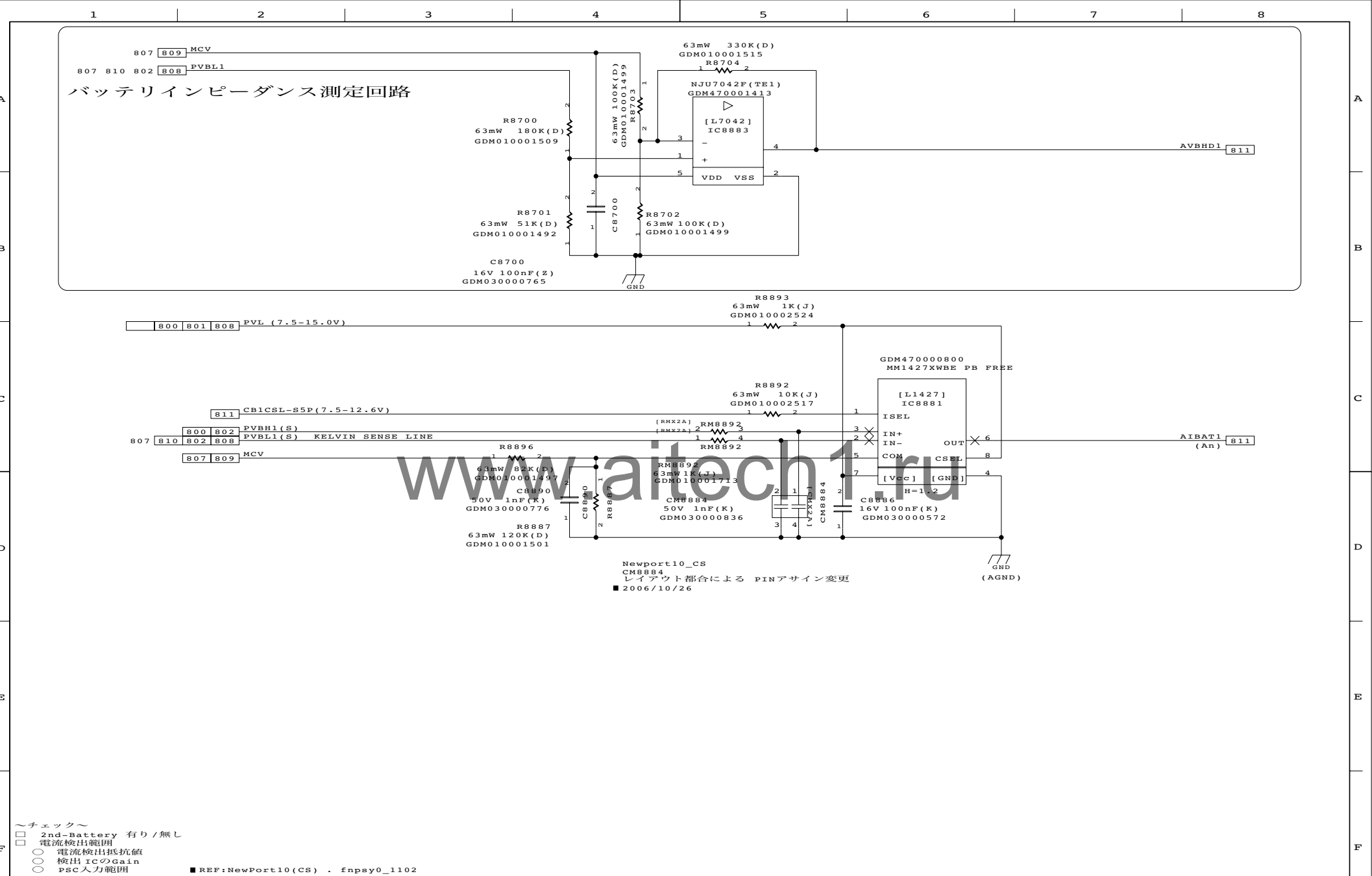
	AMTサポート	AMT 非サポート
R8876, R8879 C8871, Q8868	Mount	Not Mount

～チェック～

- ☐ 入力電圧 [PVT-EFV]
- ☐ 出力電圧 [10.0V]
- ☐ 負荷電流 [1mA Max]
- ☐ 負荷抵抗
- ☐ FETゲート漏れ電流
- ☐ 出力時定数 [ ms]

DESIGNED BY	2009/7/3	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
Y.Horie		FHNSY1	[PS]E10V	806	106	00	360069769

2009.10.15 17:09 G11



DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
Y.Horie	FHNSY1	[PS]CURRENT AMP	807	107	00	360069769
2009.10.15	17:09	G11	TOSHIBA CORPORATION			



360069769



仕向け設定あり

AC接続時 Shutdown対策は  
sh804 C8848=4.7uFで対応済みであり  
PVDCラインに容量は不要。  
■ 2008/05/14

(15.0V)  
800 PVDC  
POWER

\*C8930  
16V 100nF(K)  
GDM030000572  
H=0.9

LP2951CMX/J7000697  
GDM470000676

RGL  
[L2951]  
\*IC8900

+VIN OUT  
FBAC SENSE  
SHDWN ERR  
GND VTAP  
H=1.8 (MSOP8)

LP2951CSDX/NOPB  
GDM470000923

UREG  
[L2951A]  
IC8901

IN OUT  
FBAC SENSE  
SHDWN ERR  
GND VTAP  
GND

5.0V 10mA (Max)

MCV  
POWER

\*C8931  
10V 10uF(K)  
GDM030000754  
H=1.9

\*W8900  
100mW 0(X)  
GDM010001702

仕向け設定

Group	Dockerサポート	Docker非サポート
C8930, C8931 IC8900	Mount	Not Mount
W8900	Not Mount	Mount

5.0V 15mA (Max)

M5V  
POWER

C8933  
16V 100nF(K)  
GDM030000572  
H=0.9

C8934  
10V 10uF(K)  
GDM030000754

25V 4.7nF(K)  
GDM030000784  
C8949

R8949  
63mW 100K(D)  
GDM010001499

LP2951CSDX/NOPB  
GDM470000923

UREG  
[L2951A]  
IC8151

IN OUT  
FBAC SENSE  
SHDWN ERR  
GND VTAP  
GND

C8626  
16V 100nF(K)  
GDM030000572

R8950  
63mW 20K(D)  
GDM010001482

R8951  
63mW 39K(D)  
GDM010001489

C8628  
10V 10uF(K)  
GDM030000754

3.3V 50mA (Max)

W8863  
63mW 0(X)  
GDM010001695

R8934  
63mW 2.2K(J)  
GDM010002536

～チェック～  
☐ 出力電圧  
☐ 出力電流定格

DESIGNED BY 2009/9/25

Y.Horie

TITLE

FHNSY1

FUNCTION

[PS]S5V/S3V

SH.NO.

809

PAGE NO.

109

REV.MARK

00

DRAWING.NO.

360069769

2009.10.15 17:09 G11

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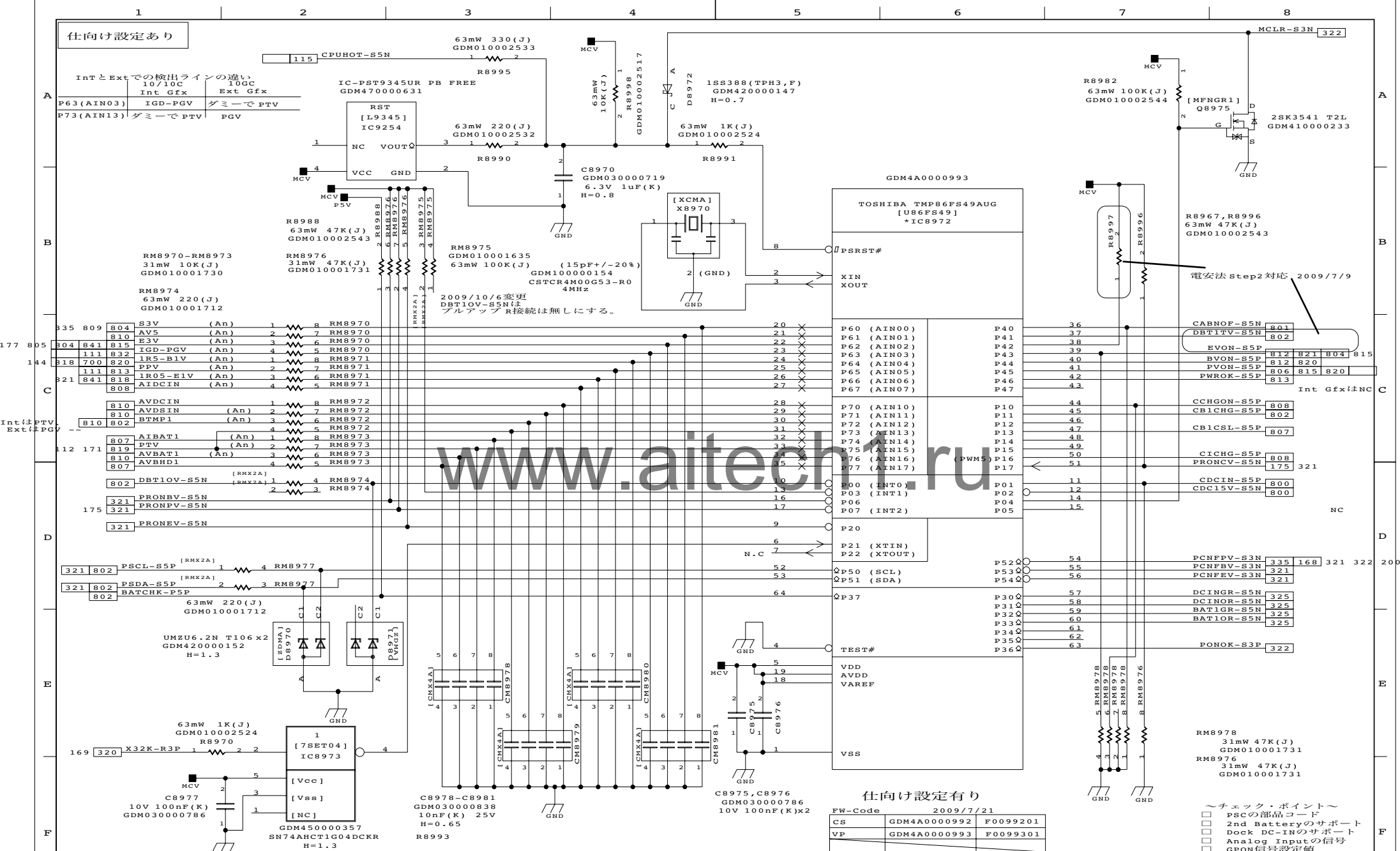


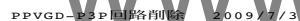
## 仕向け設定

	Dockerサポート	Docker非サポート
Group		
R8958,D8921	Mount	Not Mount
R8959	GDM010001477 12k	GDM010001218 15k

```
■ REF:NewPort10(CS) . fnpsy0_1102
```

DESIGNED BY 2009/7/15 Y.Horie	TITLE FHNSY1	FUNCTION [PS]AnalogInput	SH.NO. 810	PAGE NO. 110	REV.MARK 00	DRAWING.NO. 360069769
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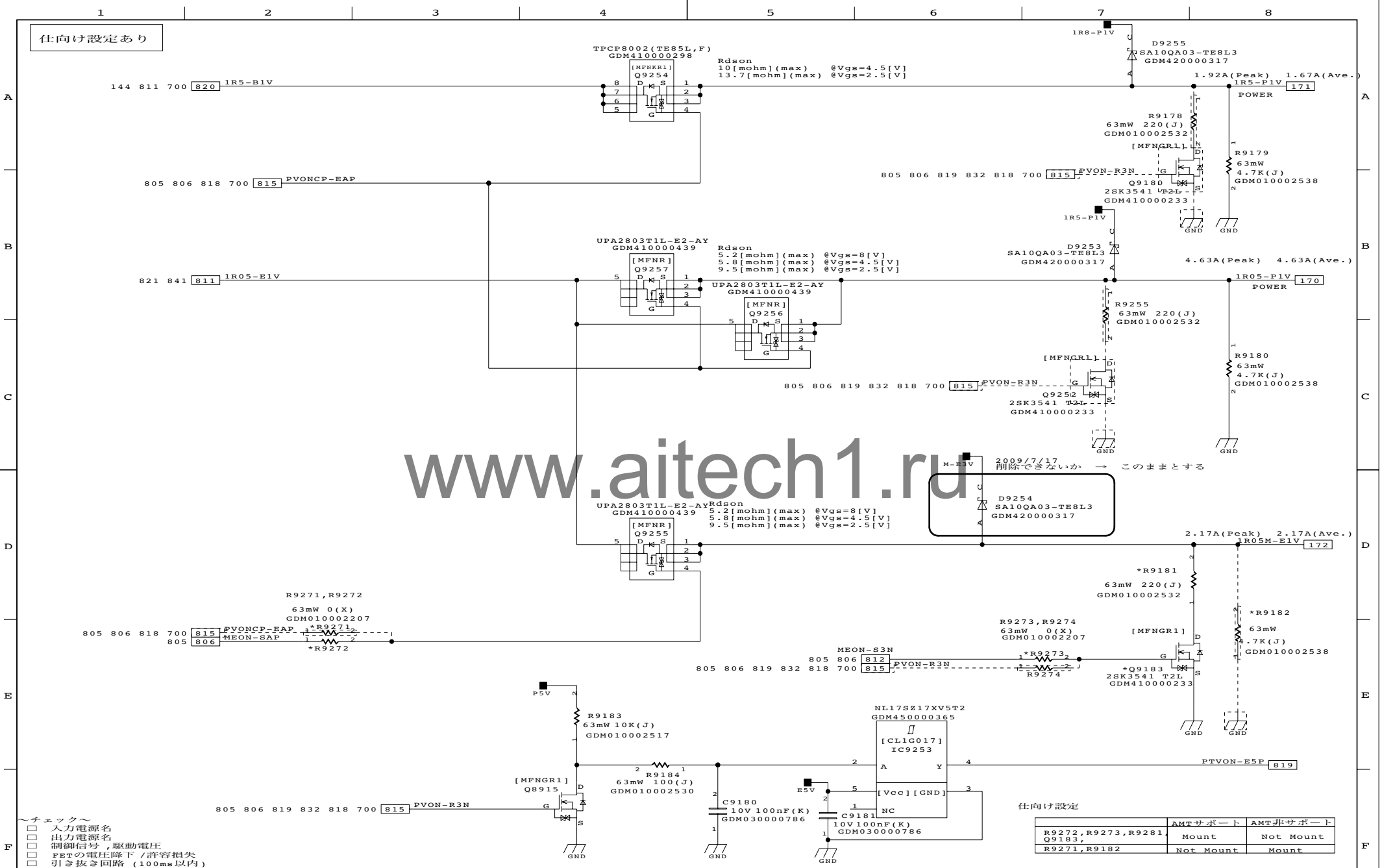




2009/7/3 2個→1個へ変更  
このshに置く必要なし、システム側へ移動したい







DESIGNED BY 2009/7/16

Y.Horie

TITLE

FHNSY1

FUNCTION

[PS]LOAD SW2

SH.NO.

818

PAGE NO.

115

REV.MARK

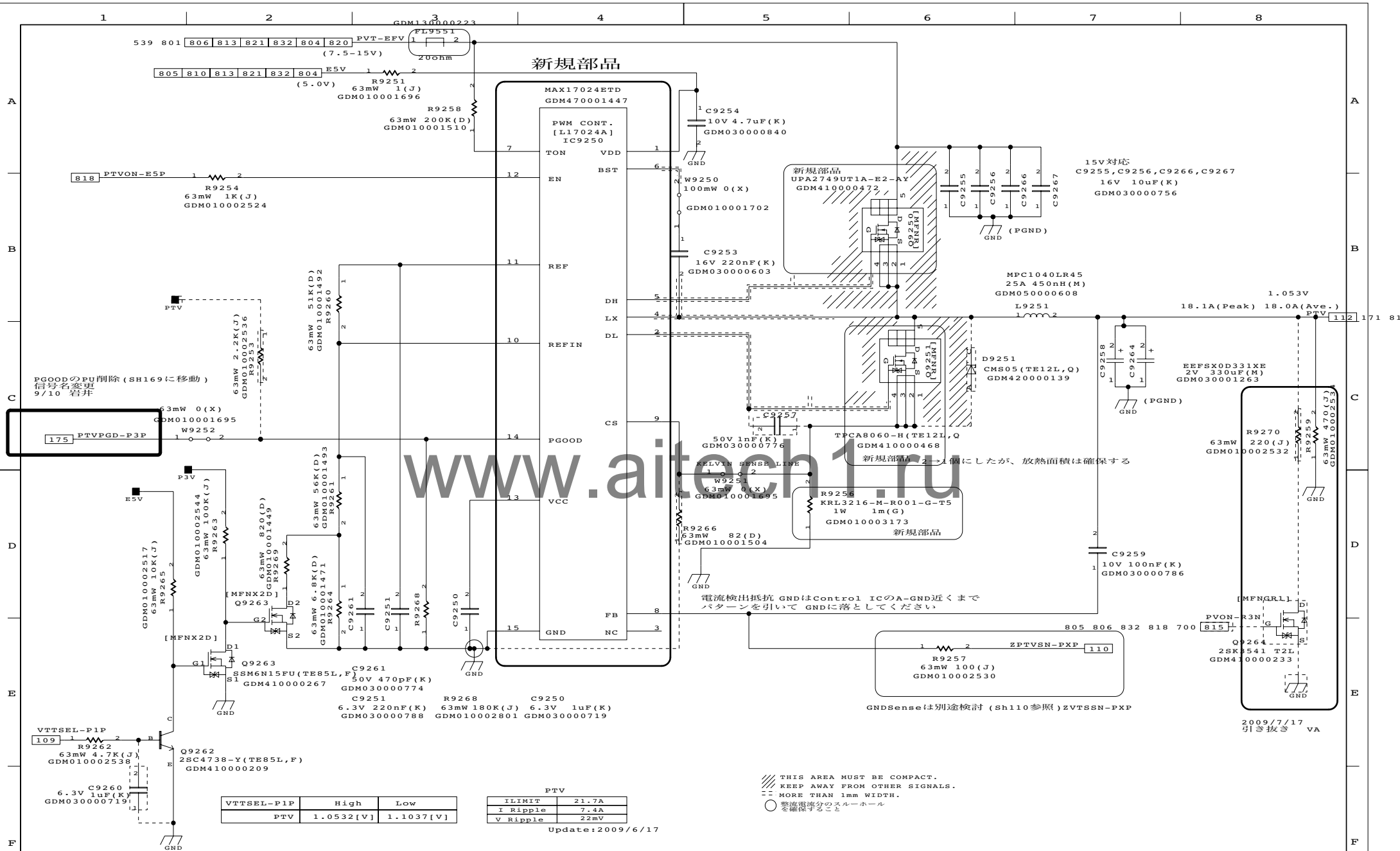
00

DRAWING.NO.

360069769

2009.10.15 17:09 G11

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DESIGNED BY 2009/9/25

A. Kanou

TITLE

FHNSY1

FUNCTION

[PS]PTV

SH.NO.

819

PAGE NO.

116

REV.MARK

00

DRAWING.NO.

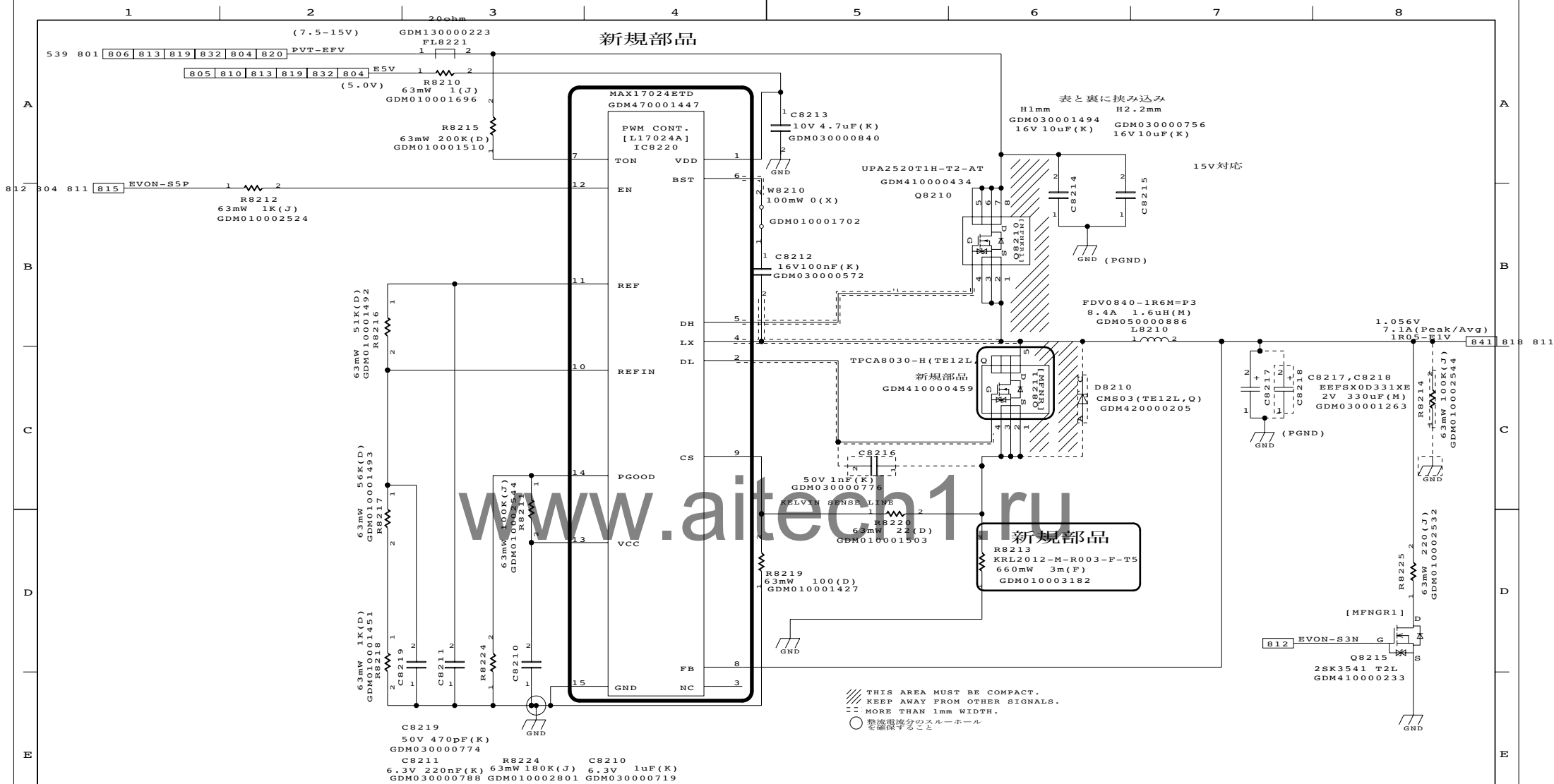
360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION







- ☐ 出力電圧 [1.0555V]  
☐ 入力電源 [PTV-EFV]  
☐ バイアス電源 [E5V]  
☐ 部品選択  
○ FET High Side [UPA2520]  
Low Side [TPCA8030]  
○ コンデンサ [2.0V 330UF 6m]  
○ コイル [1.6uH 8.4A FDV0840]  
○ ダイオード [N/M]  
☐ 電源出力制御信号 [EVON-S5P]  
☐ SKIP Mode [Enable]  
☐ 引き抜き回路 [220ohm]  
☐ リップル電流 [2.03A p-p]  
☐ 過電流リミッタ [8.34A (Min)]

DESIGNED BY 2009/9/25

Y.Horie

TITLE

FHNSY1

FUNCTION

[PS]1R05-E1V

SH.NO.

821

PAGE NO.

118

REV.MARK

00

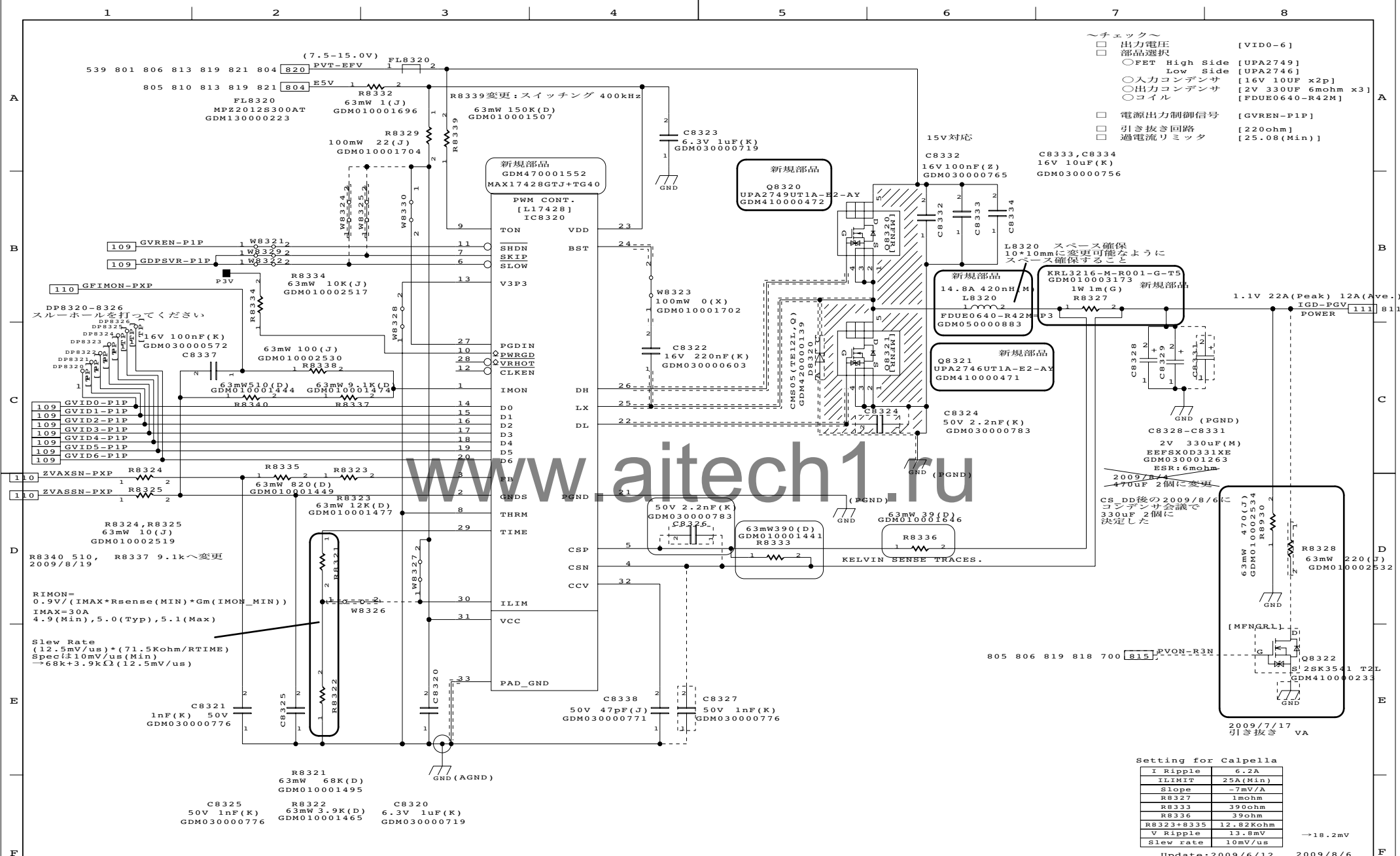
DRAWING.NO.

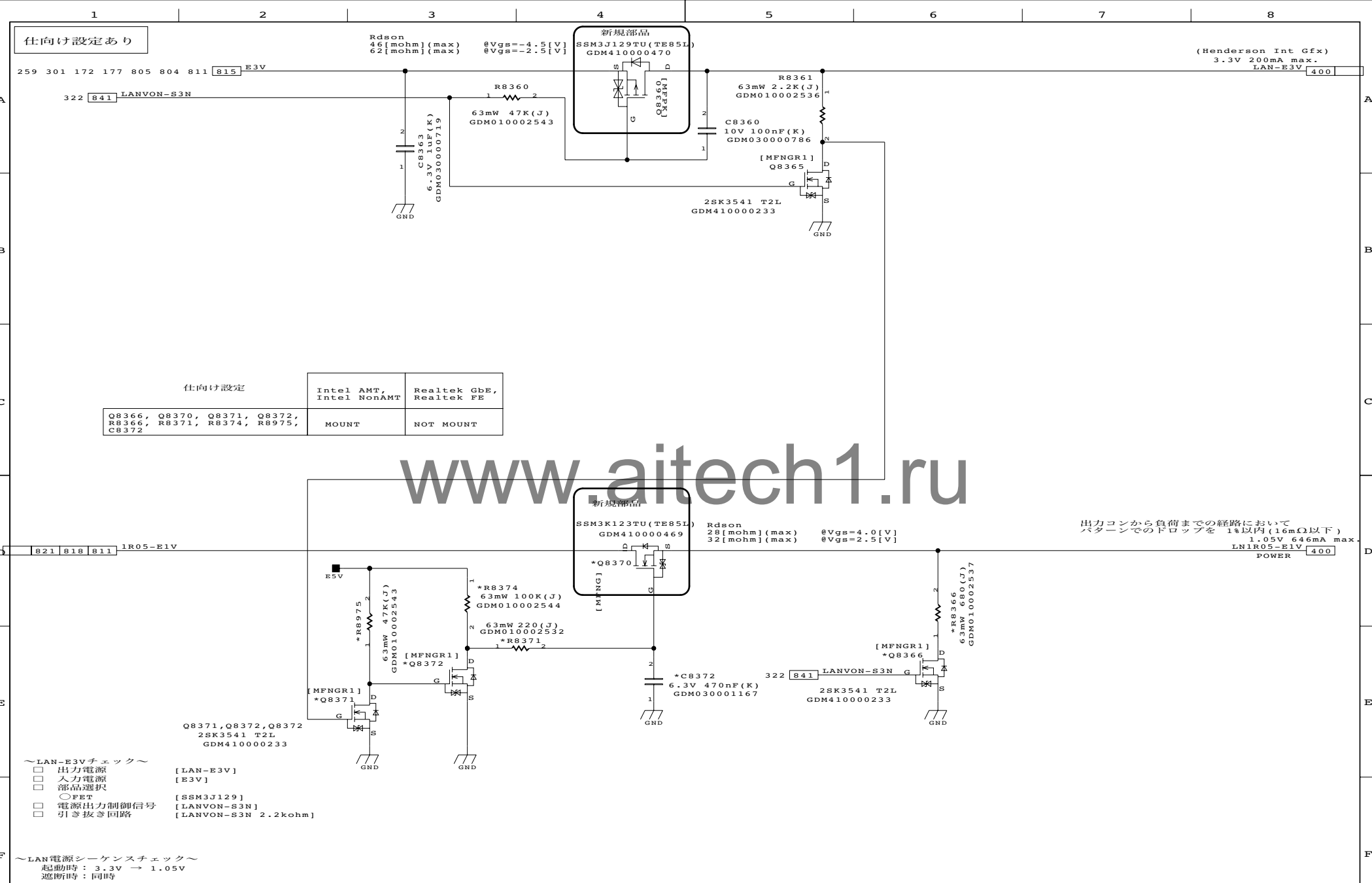
360069769

2009.10.15 17:09 G11

TOSHIBA CORPORATION

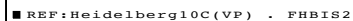
DRAWING . NO .  
360069769







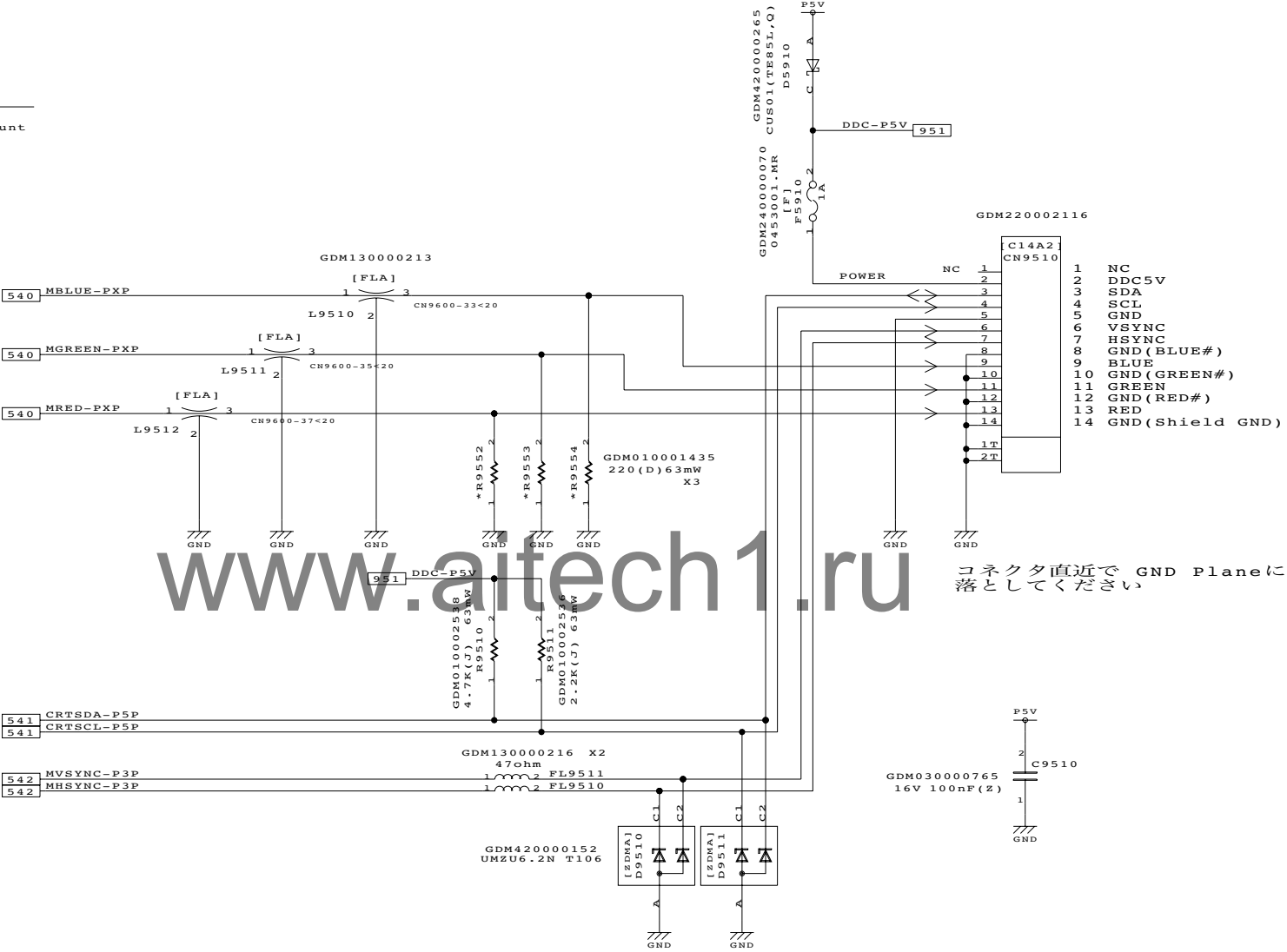
DRAWING . NO .  
360069769



2009.10.15 17:09 G11

仕向け設定有

	Dock	
	Yes	No
R9552-R9554	Mount	NotMount



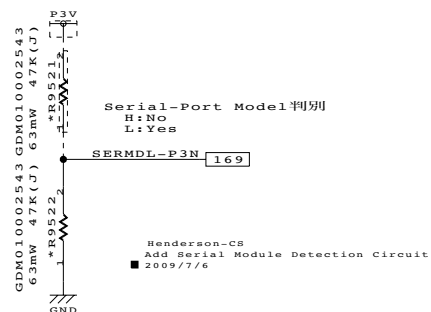
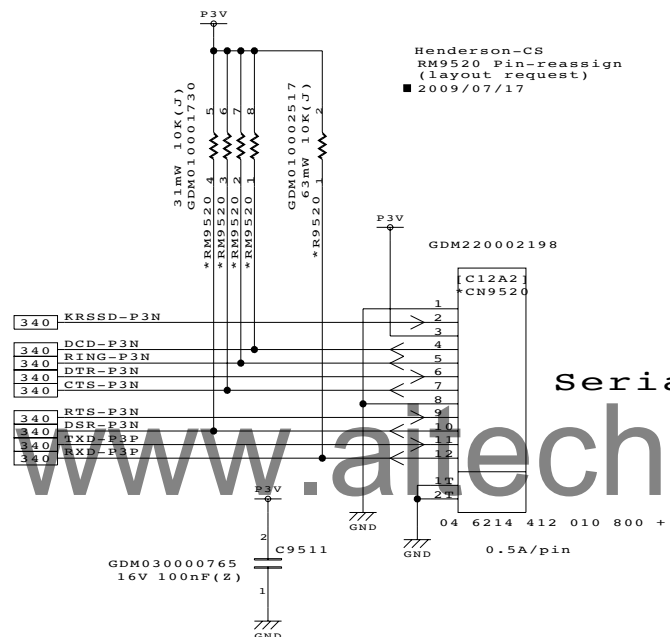
コネクタ直近で GND Planeに  
落としてください

REF: Moscow10C (VP)

DESIGNED BY	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Naruse/T.OCHIAI	FHNSY1	RGB Unit I/F	951	124	00	360069769

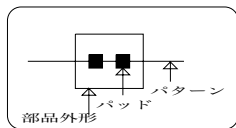


Serial Unit I/F



■ REF:Malgow(VP) . FG6IN1

DESIGNED BY	2009/10/15	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
T.Ichimura		FHNSY1	Serial Unit I/F	952	125	00	360069769



2009.10.15 17:09

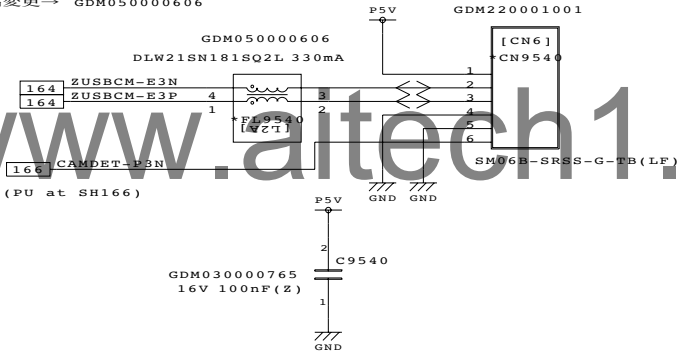
仕向け設定有

Malgow\_CS  
Camera検出GPI追加  
■ 2008/02/14

Henderson-CS  
Move CANDETのPU to SH166  
(Delete R9540)  
■ 2009/07/21

Henderson10-VP  
FL9540追加  
■ 2009/10/13

Henderson10-VP  
FL9540ピン入替え、部品変更→ GDM050000606  
■ 2009/10/15



■ REF:Heidelberg10C (VP) . FHBIS2										
DESIGNED BY T.Ichimura		TITLE FHNSY1		FUNCTION WebCam I/F		SH.NO. 954	PAGE NO. 127	REV.MARK 00	DRAWING.NO. 360069769	
2009.10.15		17:09		G11		TOSHIBA CONFIDENTIAL		TOSHIBA CORPORATION		

F



DRAWING . NO .
360069769

Henderson-CS  
CN9570変更  
→GDM220001685  
■ 2009/06/15

The diagram shows the pin assignments for the Henderson-CS CN9570 component connected to the GDM220001685 component. The pins are numbered 1 through 20. The connections are as follows:

- Pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 are connected to GND.
- Pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 are connected to GND.

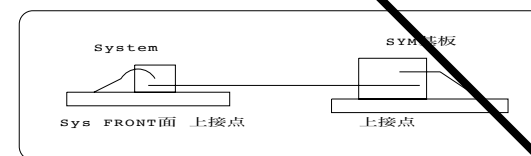
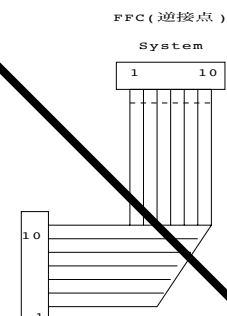
この間はGNDで挟む →

(UIM-GND)

GDM220001685

www.altech

Henderson-CS  
CN9570 Pin Assign Reversed  
■ 2009/07/08



DRAWING . NO .  
360069769

## 仕向け設定有

WLAN	YES	NO
C9702	Mount	Mount
W9570	Not Mount	Not Mount
IC9700 Q9700 CN9700 C9701 C9700 R9700 R9701	Mount	Not Mount

Tucson10G CS3  
Felica用のE5VラインにSWを追加。  
■ 2007/02/14

セットで配置してください。  
GDM010001702

W9570  
LSC=0-2  
0(X) 100mW

GDM410000226

[MEPI]  
\*Q9700

TPC6104 (TE85L, F)

GDM450000462

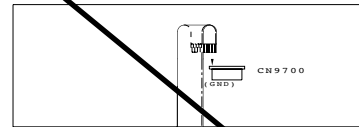
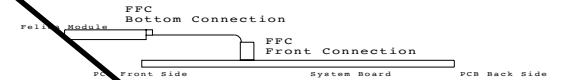
[7SET08]  
\*IC9700

[Vcc]  
[Vss]

TC7SET08FU (TE85L, F)

\*R9700  
GDM010002542  
33K(J) 63mW

\*C9700  
GDM030000764  
22nF(K) 16V



CAP10 Connection Image  
2008.08.14

## [FeliCa I/F]

08 6252 006 340 846+

GDM220002041

Henderson  
FeliCa I/F Unit  
Pin Assignment

#	Name
1	VDD
2	USB-
3	USB+
4	GND
5	N.C.
6	GND

Henderson-CS

CN9700変更  
→GDM220002041  
■ 2009/06/15

Henderson-CS  
CN9700:接続変更  
■ 2009/07/09

Duluth10 CS  
CN9570のピンアサインを反転  
■ 2008/01/19

Cassiopeial0 CS  
CN9700:GDM220002041→GDM220002127  
■ 2008/01/19

Cassiopeial0 CS  
CN9700:接続変更  
■ 2008/08/11

Tucson10G CS3  
R9570, C9571を追加。  
■ 2007/02/14

www.aitech1.ru

FDUSY0  
Duluth用に信号名変更。  
■ 2008/01/05

FDUSY0  
バススイッチの未実装パターンを削除。  
■ 2008/01/05

Henderson-CS  
Felica/SmartCard用に信号名変更  
■ 2009/06/29

Henderson-CS  
Felica用に信号名変更  
■ 2009/07/21

Felica Model判別  
H:No  
L:Yes

FELMDL-P3N 166

Henderson-CS  
Add Felica Module Detection Circuit  
■ 2009/7/6

■ REF:Cassiopeial0(VP) . FCASY1

DESIGNED BY	2009/10/15	TITLE	FUNCTION	SH.NO.	PAGE NO.	REV.MARK	DRAWING.NO.
Ling.Yu		FHNSY1	FELICA I/F	970	130	00	360069769

2009.10.15 17:09

TOSHIBA CORPORATION

