

TOSHIBA CONFIDENTIAL

SCHEMATIC DIAGRAMS

PRODUCT NAME Lumos10 (VP)

UNIT NAME FLM1M2

UNIT NO. DPL3X072G01

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	001	COVER SHEET	06	26	135	Montara-GT strap	00	51	211	PC-CARD I/F	04	76	461	USB POWER	02
2	002	COVER & Rev. SHEET	06	27	140	DDR I/F Rs 1	04	52	212	SD LED	00	77	520	TV I/F	04
3	003	BLOCK DIAGRAM	02	28	141	DDR I/F Rs 2	04	53	213	SD CONN	00	78	530	LCD PS I/F	00
4	004	NOTES	02	29	142	SO-DIMMO 1	04	54	220	MiniPCI I/F	00	79	531	LCD CONN.	00
5	005	Grouping Direction	05	30	143	SO-DIMMO 2	04	55	301	MDC I/F	04	80	532	CRT I/F	00
6	100	CK408	04	31	144	SO-DIMM1 1	04	56	320	SMSC EC/KBC 1	00	81	534	TV CONN.	04
7	105	mPGA479M 1	06	32	145	SO-DIMM1 2	04	57	321	SMSC EC/KBC 2	00	82	535	Level Shift	04
8	106	mPGA479M 2	06	33	146	DDR I/F RT	04	58	322	SMSC EC/KBC 3	02	83	600	AD1981B	00
9	107	mPGA479M 3	06	34	147	DDR DECOUPLING	02	59	323	SMSC EC/KBC 4	05	84	604	SPEAKER CON	00
10	108	mPGA479M 4	06	35	160	ICH4-M 1	00	60	324	SMSC EC/KBC 5	00	85	605	AMP MM1517A	04
11	109	mPGA479M 5	06	36	161	ICH4-M 2	00	61	325	KB I/F	04	86	608	ANALOG POWER	04
12	110	Timing Control	00	37	162	ICH4-M 3	00	62	326	PAD I/F	00	87	750	EMI CAPS	03
13	115	Thermal Sensor	02	38	163	ICH4-M 4	04	63	328	KB LED	00	88	800	[PS] DC-IN	04
14	116	ITP	00	39	164	ICH4-M 5	00	64	331	POWER SWITCH	04	89	801	[PS] PVT SW	00
15	120	Montara-GT 1	00	40	165	ICH4-M 6	00	65	351	PARALLEL I/F	00	90	802	[PS] 1st Battery	04
16	121	Montara-GT 2	00	41	166	ICH4-M 7	02	66	354	BIOS for SMSC	04	91	804	[PS] E5V/E3V	02
17	122	Montara-GT 3	00	42	167	ICH4-M 8	02	67	400	KINNERETH	04	92	805	[PS] PW SW	00
18	123	Montara-GT 4	04	43	180	HDD I/F	00	68	403	NETWORK I/F	03	93	806	[PS] E10V	00
19	124	Montara-GT 5	00	44	181	CD ROM I/F	00	69	420	1394 PHY/LINK (1)	00	94	807	[PS] CURRENT AMP	00
20	125	Montara-GT 6	00	45	200	YEBISUSS (1)	00	70	421	1394 PHY/LINK (2)	04	95	808	[PS] CHARGE	00
21	126	Montara-GT 7	00	46	201	YEBISUSS (2)	00	71	422	1394 EEPROM	00	96	809	[PS] MCV/S*V	00
22	127	Montara-GT 8	00	47	202	YEBISUSS (3)	00	72	423	1394 I/F	02	97	810	[PS] Analog Input	00
23	128	Montara-GT 9	00	48	203	YEBISUSS (4)	00	73	424	1394 POWER/Etc	00	98	811	[PS] PSC(1)	04
24	129	Montara-GT 10	00	49	205	YEBISUSS (5)	00	74	425	1394 COMMENT	00	99	812	[PS] PSC(2)	00
25	130	Montara-GT 11	00	50	210	PC-CARD POWER	00	75	460	USB I/F	00	100	813	[PS] CPUVCC(1)	04

APPROVED BY [PC設1]([P設7]) A. Nagae	CHECKED BY [PC設1]([P設7]) A. Sakai	DESIGNED BY [PC設1]([P設7]) Y. Shimazaki	TITLE FLM1M2	TOTAL 113	PAGE NO. 1	REV. MARK 06	DRAWING. NO. 360048117
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SCHEMATIC DIAGRAMS

PRODUCT NAME

UNIT NAME

UNIT NO.

PWA NAME

PWA NO.

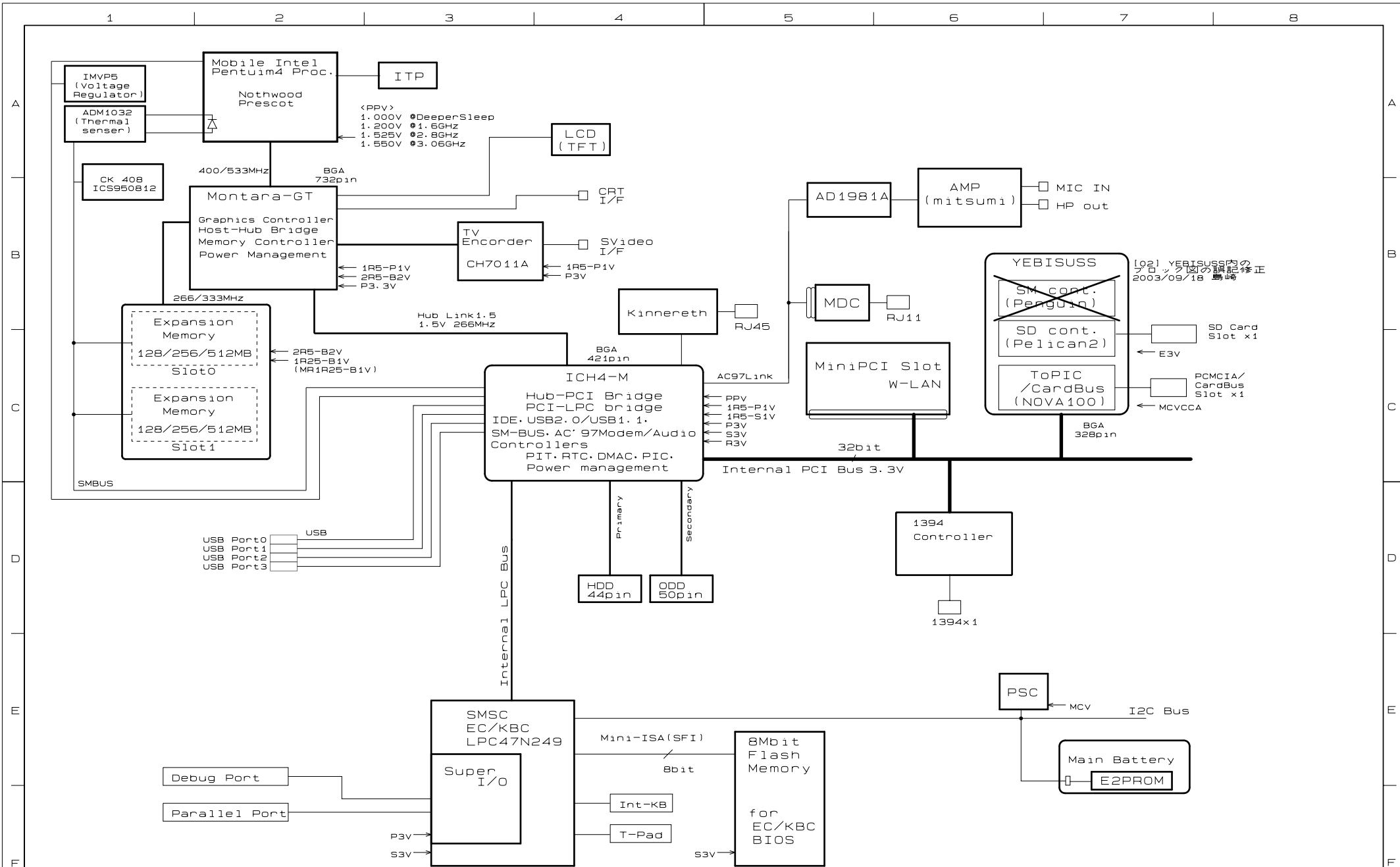
PWB NAME

PWB NO.

PAGE	SH.	FUNCTION	REV	PAGE	SH.	FUNCTION	REV
101	814	[PS] CPUVCC(2)	00	126			00
102	815	[PS] CPUVCC(3)	00	127			
103	816	[PS] 2R5-B2V	02	128			
104	817	[PS] 1R25-P1V	02	129			
105	818	[PS] PW-SW	00	130			
106	819	[PS] VID1R2-P1V	02	131			
107	820	[PS] 1R5-C1V	02	132			
108	822	[PS] RTCVCC	00	133			
109	823	[PS] FANVCC	02	134			
110	824	[PS] FANVCC(1)	06	135			
111	950	FLMGL* I/F	00	136			
112	955	FLMGS* I/F	00	137			
113	960	FLMCD* I/F	00	138			
114			00	139			
115			00	140			
116			00	141			
117			00	142			
118			00	143			
119			00	144			
120			00	145			
121			00	146			
122			00	147			
123			00	148			
124			00	149			
125			00	150			

REV. MARK	CONTENTS	APPROVED BY	REVISED BY	REGISTERED
00	ISSUE			
01	1PHB-CR-03A050 実施 変更頁：98			
02	ISSUE for CS2			
	変更頁：1-5, 13, 29-32, 34, 41, 42, 58, 64, 66, 68, 70, 72, 76, 86-88, 90, 91, 103, 104, 106, 107, 109			
03	CS2 DR中の変更			
	PHY-CR-03A-C-083, CR-LUM10-002 適用 変更頁：1, 2, 7-11, 67, 68, 87			
04	ISSUE for VP	A. Nagae (1p設7) 2003/10/22	Y. Shimazaki (1p設7) 2003/10/22	
	変更頁：1, 2, 5-11, 18, 27-33, 38, 51, 55, 61, 64, 66, 67, 70, 77, 81, 82, 85, 86, 88, 90, 98, 100			
05	TV-Out機能有りモデル対応 変更頁：1, 2, 5, 59	A. Nagae (1p設7) 2003/11/4	Y. Shimazaki (1p設7) 2003/11/4	
06	CN22P20031107030適用 (CPU Socket変更、2ndFAN電圧定数変更) 変更頁：1, 2, 7-11, 110	A. Nagae (1p設7) 2003/11/17	Y. Shimazaki (1p設7) 2003/11/17	

APPROVED BY	CHECKED BY	DESIGNED BY	TITLE	TOTAL	PAGE NO.	REV. MARK	DRAWING NO.
			FLM1M2		2	06	360048117
2003. 11. 17	14:10						



DESIGNED BY
Y. Shimazaki

TITLE
FLM1M2

FUNCTION
BLOCK DIAGRAM

SH. NO.
3

PAGE NO.
3

REV. MARK
02

DRAWING. NO.
360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION

1

2

3

4

5

6

7

8

関連資料

BGA BALL MAP : 360047440 {02}
回路設計仕様書 : 360047355 {02}

基板構成

ペットネーム : FLM***

SYSTEM PCB	: FLM1M*	} 異種多面構成
LED PCB	: FLM1L*	
SOUND PCB	: FLM1S*	
CD BUTTON PCB	: FLMCD*	

A

B

C

D

E

F

A

B

C

D

E

F

DESIGNED BY Y. Shimazaki	TITLE FLM1M2	FUNCTION NOTES	SH. NO. 4	PAGE NO. 4	REV. MARK 00	DRAWING. NO. 360048117
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1

2

3

4

5

6

7

8

4 [05]

システム基板には以下の2種類のグループがある。[02]

FLM1M* G01 : SD/1394 有, TV-Out 無

FLM1M* G02 : SD/1394 無, TV-Out 無

FLM1M* G03 : SD/1394 有, TV-Out 有 [05]

FLM1M* G04 : SD/1394 無, TV-Out 有 [05]

SD/1394有無の違い [05]

Sht. No.	Ref. No.	G01 / G03 (SD/1394有) [05]	G02 / G04 (SD/1394無) [05]
SH. 200	R2000	MOUNT	NOT MOUNT
	W2001	NOT MOUNT	MOUNT
SH. 212	DS2120	MOUNT	NOT MOUNT
	Q2121		
	R2122		
SH. 213	C2130	MOUNT	NOT MOUNT
	PJ2130		
SH. 323	R3246	NOT MOUNT	MOUNT
	R3248	MOUNT	NOT MOUNT
SH. 420	IC4200	MOUNT	NOT MOUNT
	R4200-R4205		
	R4214		
	RM4201		
SH. 421	C4200-C4228	MOUNT	NOT MOUNT
	C4230		
	C4236		
	C4240		
	IC4200		
	L4200		
	R4206-R4207		
	W4200 ^[04] W4201		
	X4200		
SH. 422	C4243	MOUNT	NOT MOUNT
	IC4201		
SH. 423	C4244-C4245	MOUNT	NOT MOUNT
	L4202-L4203		
	PJ4200		
	R4209-R4213		

TV-Out有無の違い [05]

Sht. No.	Ref. No.	G01 / G02 (TV-Out無)	G03 / G04 (TV-Out有) [05]
SH. 123	R1201	MOUNT	NOT MOUNT
	R1237	NOT MOUNT	MOUNT
SH. 323	R3244	NOT MOUNT	MOUNT
	R3245	MOUNT	NOT MOUNT
SH. 520	C5400-C5412	NOT MOUNT	MOUNT
	FL5400-FL5402		
	IC5400		
	L5400		
	R5403-R5407		
	RM5400		
SH. 534	C5641-C5646	NOT MOUNT	MOUNT
	L5641-L5642		
	PJ5640		
SH. 535	IC5640	NOT MOUNT	MOUNT
	R5641-5643		

DESIGNED BY

Y. Shimazaki

TITLE

FLM1M2

FUNCTION

Grouping Direction

SH. NO.

5

PAGE NO.

5

REV. MARK

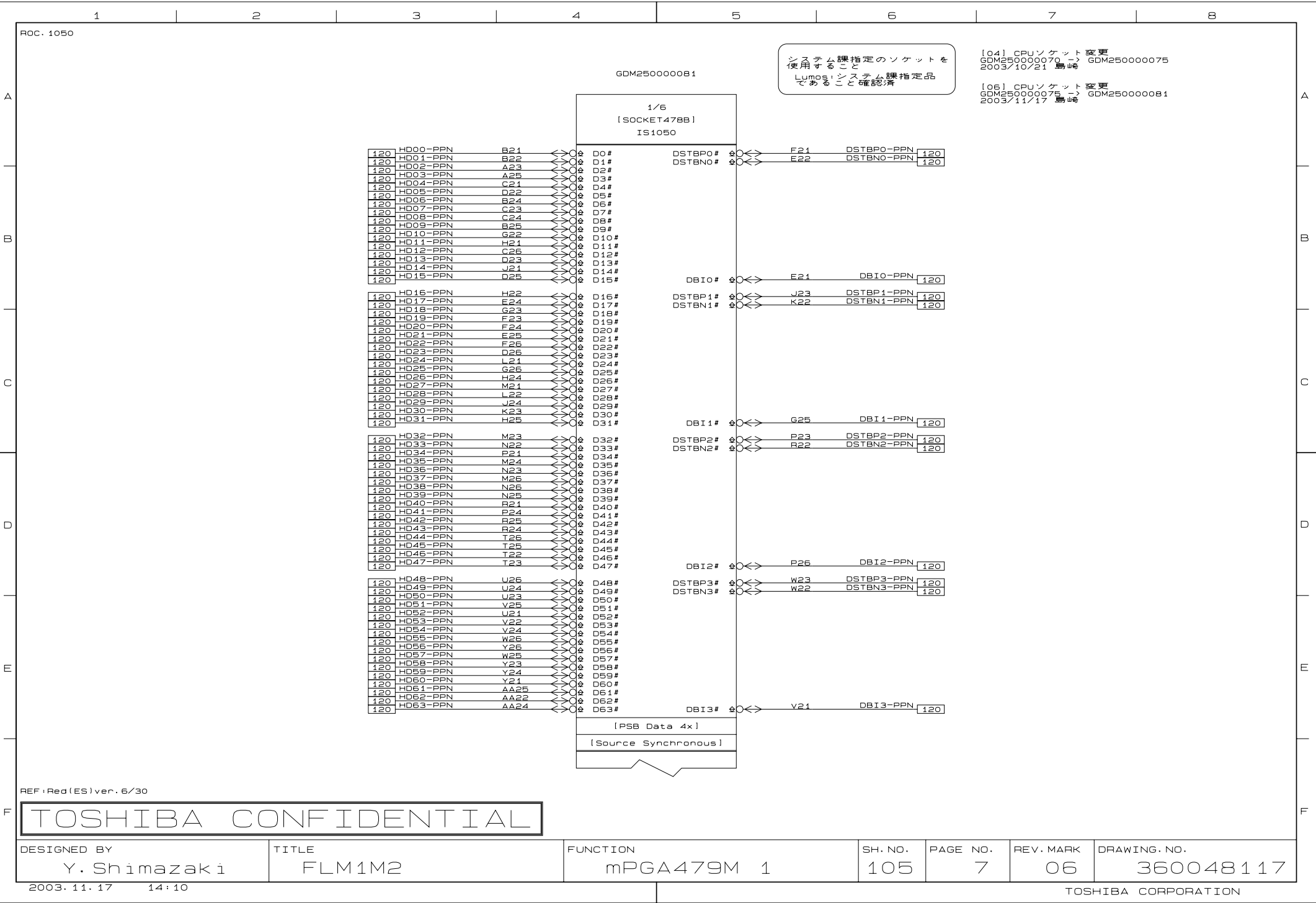
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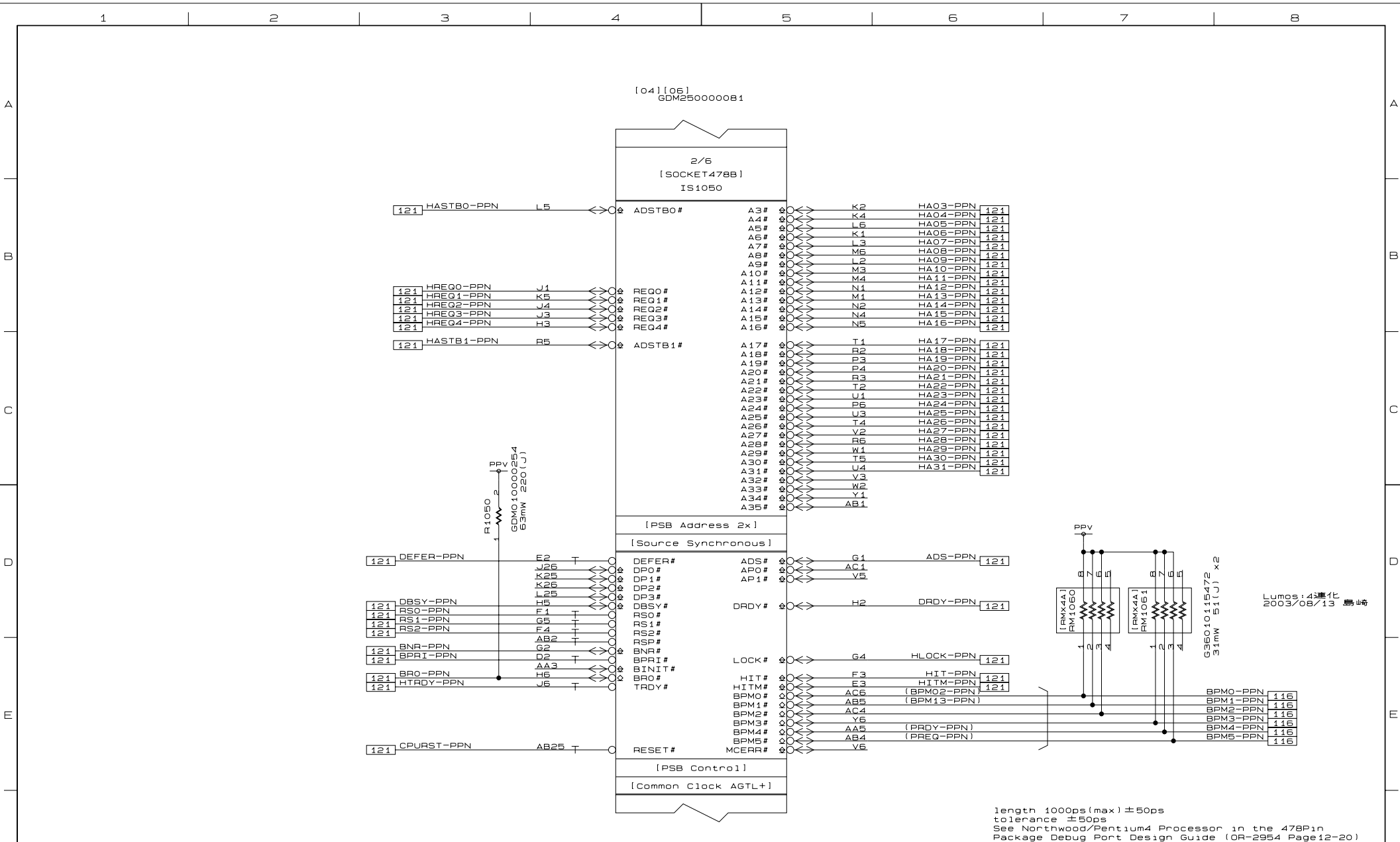
DRAWING. NO.

360048117

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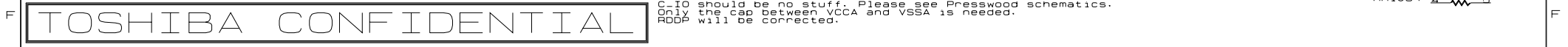
REF: Red (ES) ver. 6/30

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DESIGNED BY	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki	FLM1M2	mPGA479M 2	106	8	06	360048117

2003. 11. 17 14:10

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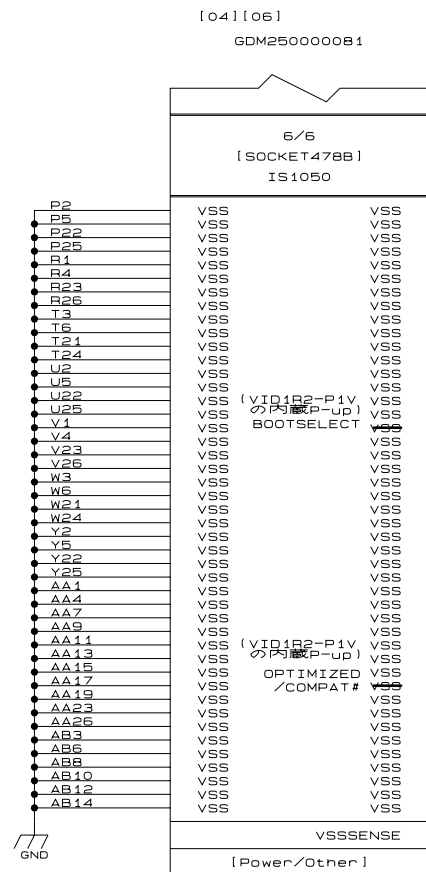


A



E

F



VIDIAR2-P1V

R1075

GDMO10000263
63mW 4.7K (J)

22K (J) 63mW
GDMO10000267
R1077

1 2

R1076

GDMO10000271
63mW 100K (J)

3

GND

(Pull-Up 27k to E5V
Montara-GT RDDP 0.7)

PSCDET-E5N 812

Q1050
2SC4116-Y (TE85L)
G36410176011

C

E

GND

GDMO10000202
63mW 0(X)

W1056

1 2 3 4

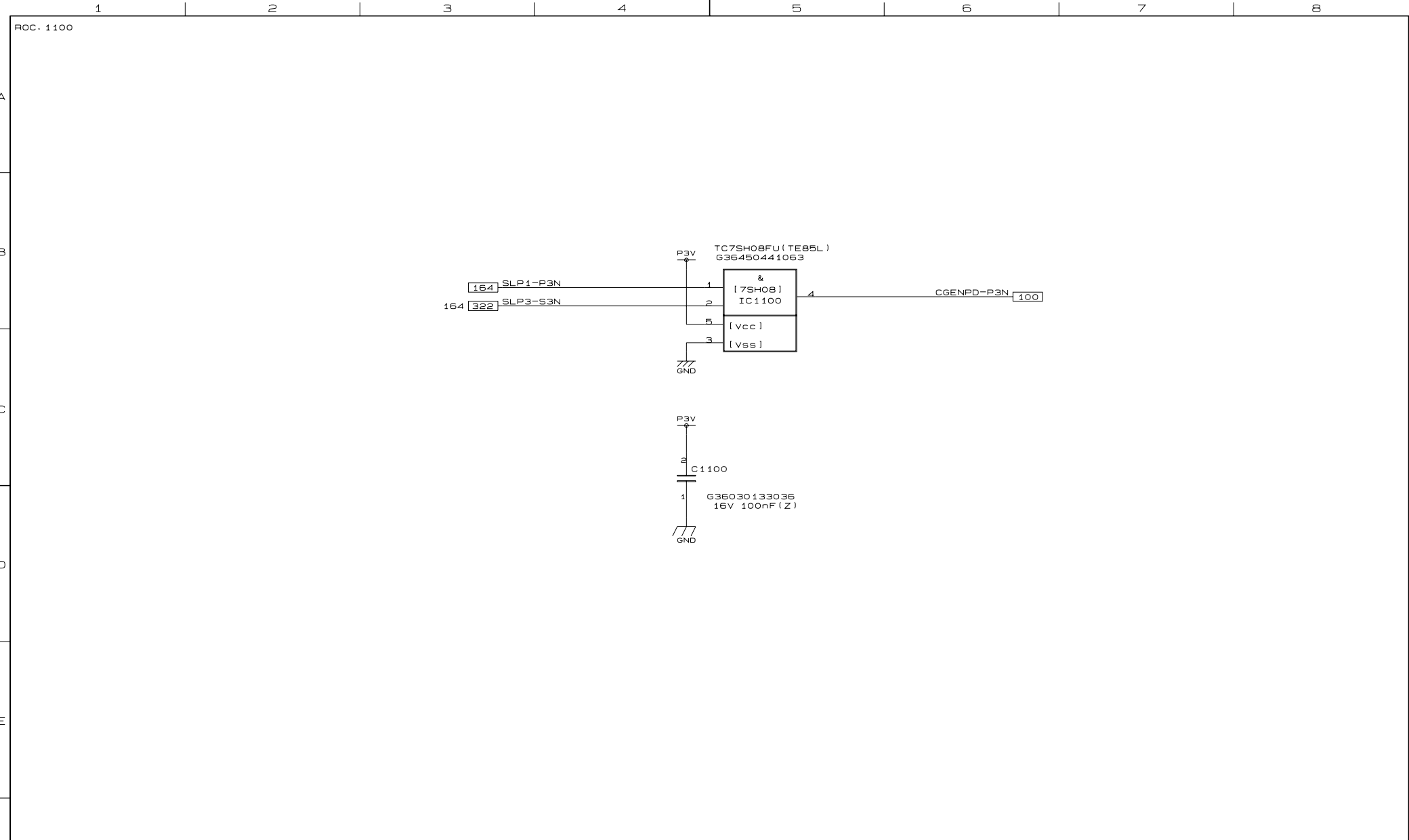
GND

1 TP1
DP1051

PPVGND-PXP 813

F TOSHIBA CONFIDENTIAL F

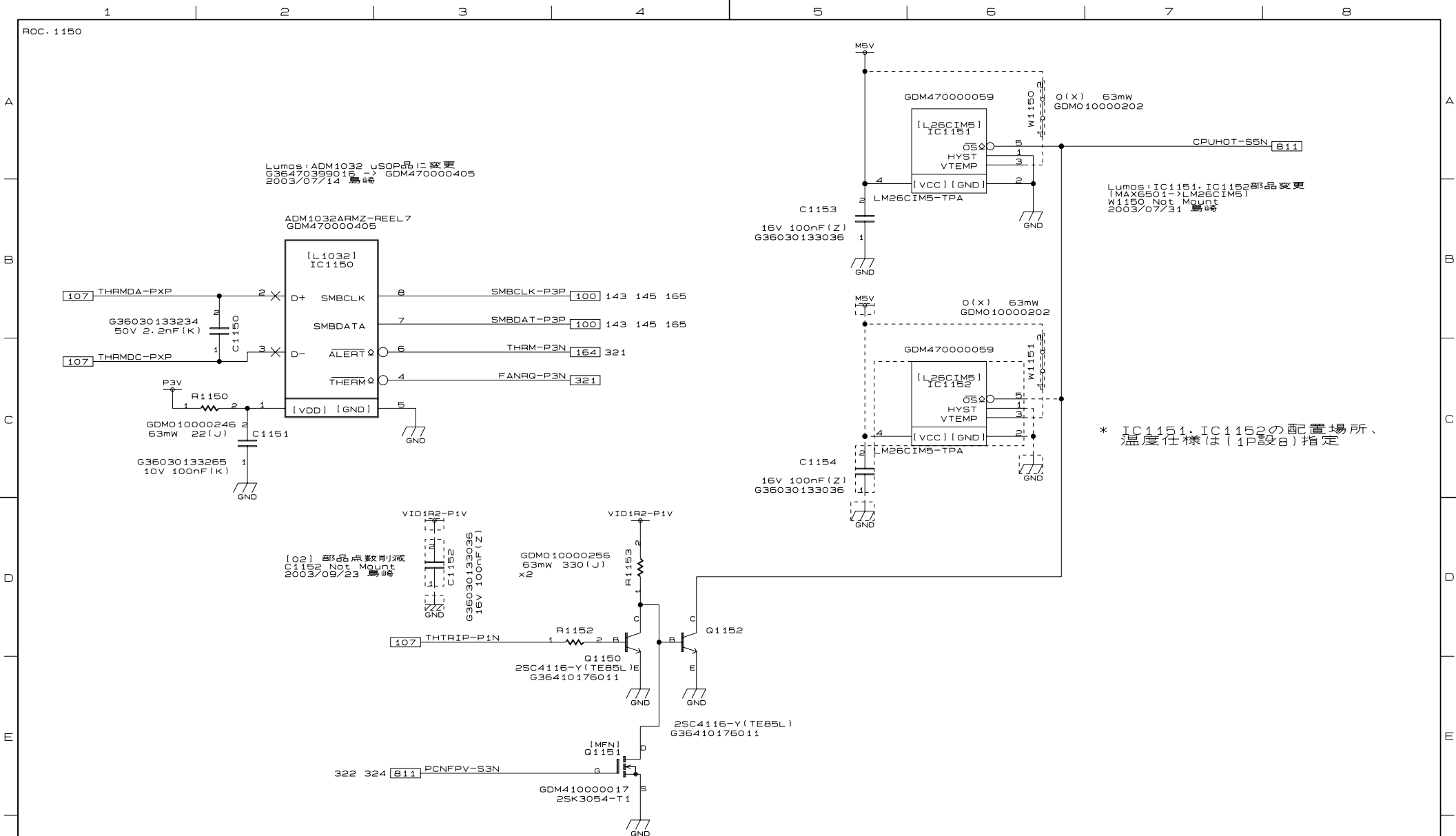
2003. 11. 17 14:10



REF: Red (ES) ver. 6/30

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DESIGNED BY Y. Shimazaki	TITLE FLM1M2	FUNCTION Timing Control	SH. NO. 110	PAGE NO. 12	REV. MARK 00	DRAWING. NO. 360048117
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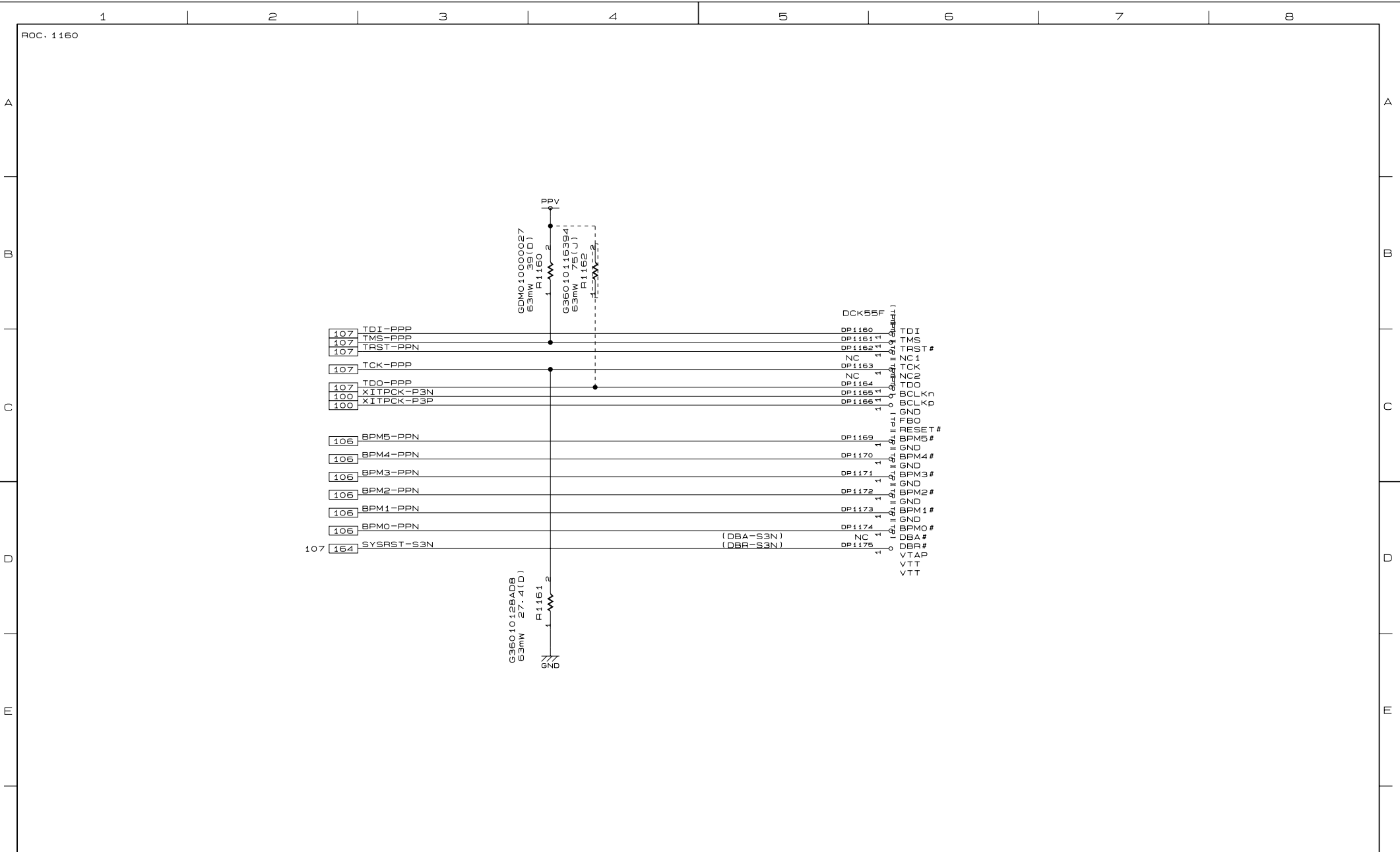
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TOSHIBA CONFIDENTIAL

DESIGNED BY	2003/5/24	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	Thermal Sensor	115	13	02	360048117

2003. 11. 17 14:10

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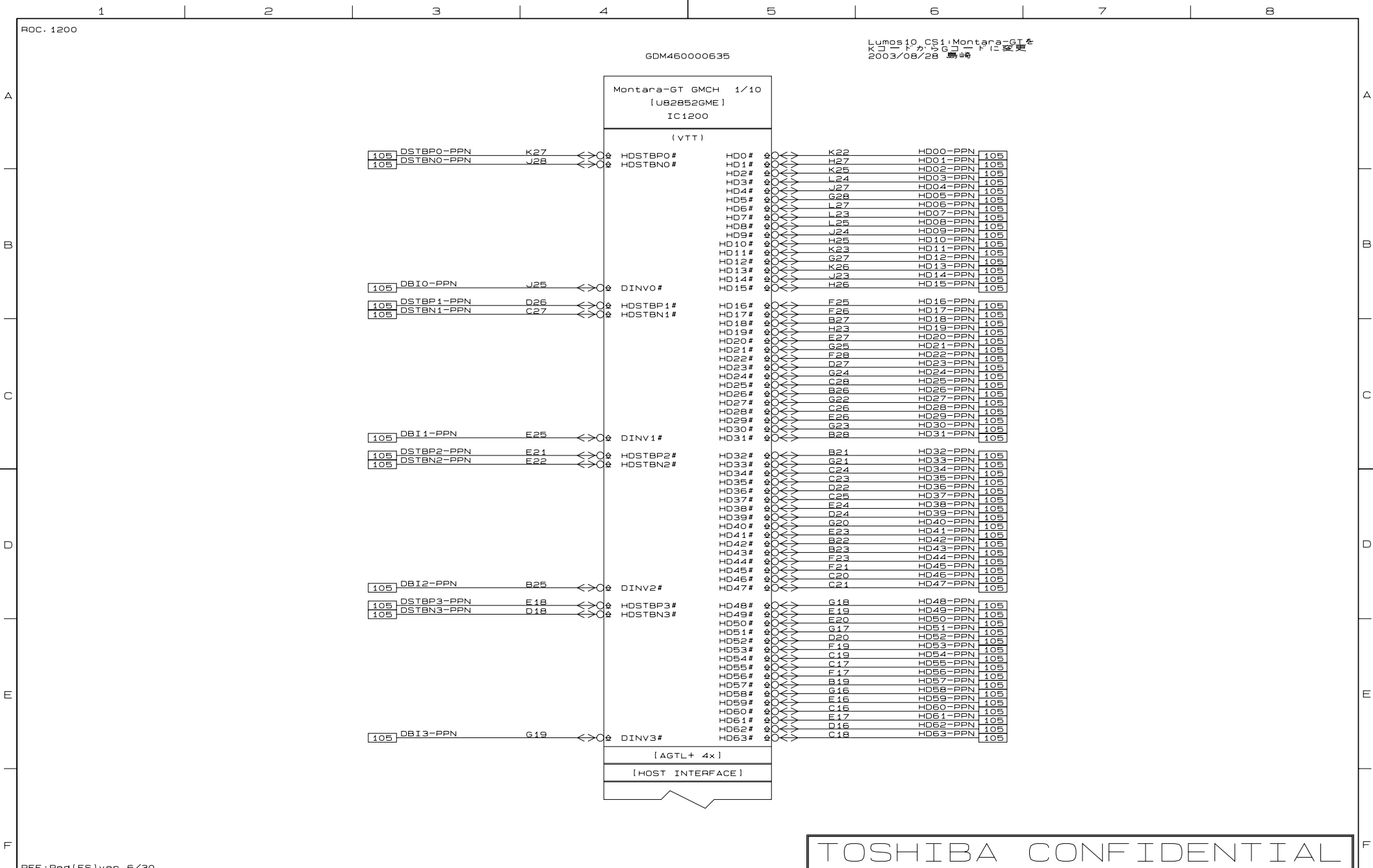


REF: Red(ES) ver. 6/30

DESIGNED BY	2003/5/24	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	ITP	116	14	00	360048117

2003. 11. 17 14:10

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REF:Red(ES)ver. 6/30

DESIGNED BY 2003/5/24

Y. Shimazaki

TITLE

FLM1M2

FUNCTION

Montara-GT 1

SH. NO.

120

PAGE NO.

15

REV. MARK

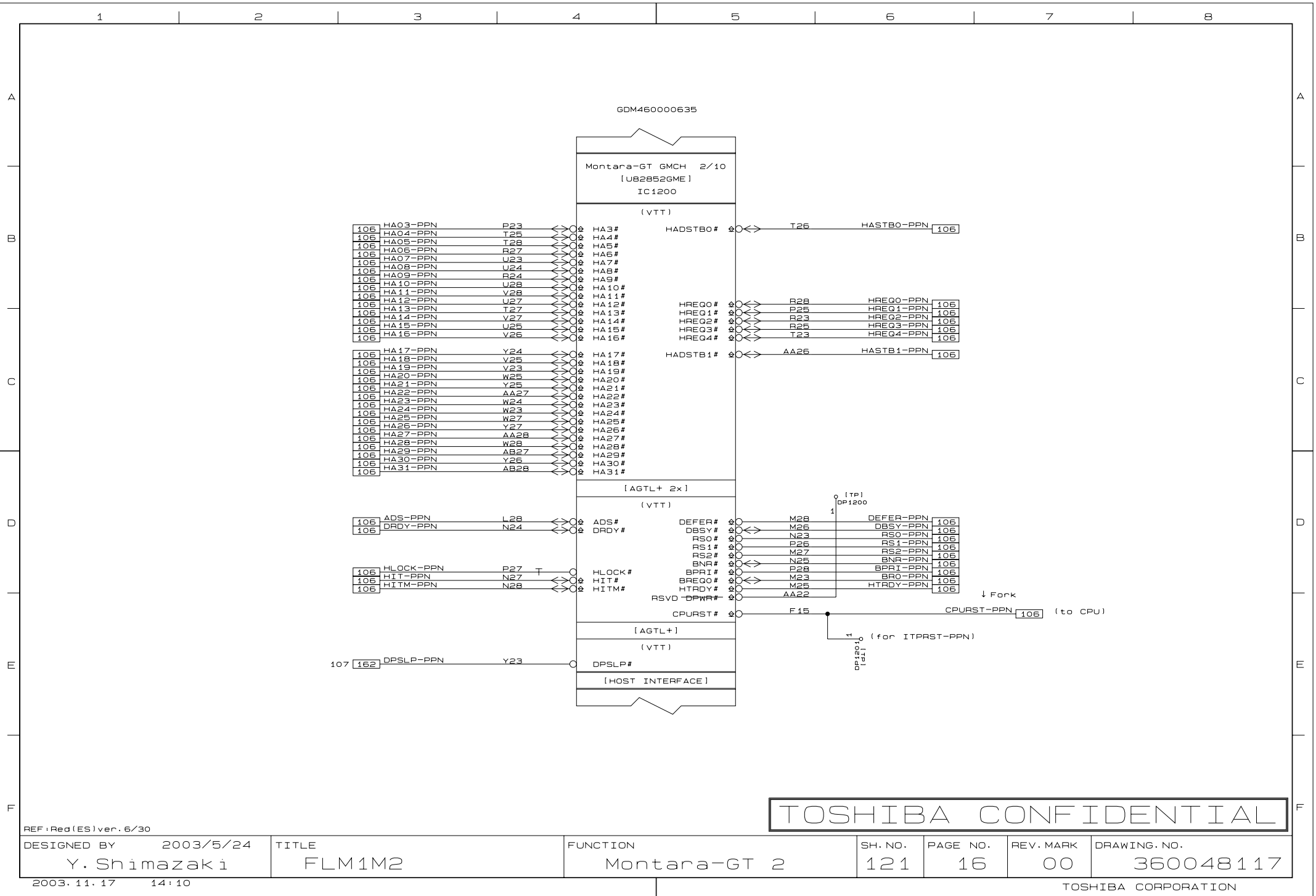
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DRAWING. NO.

360048117

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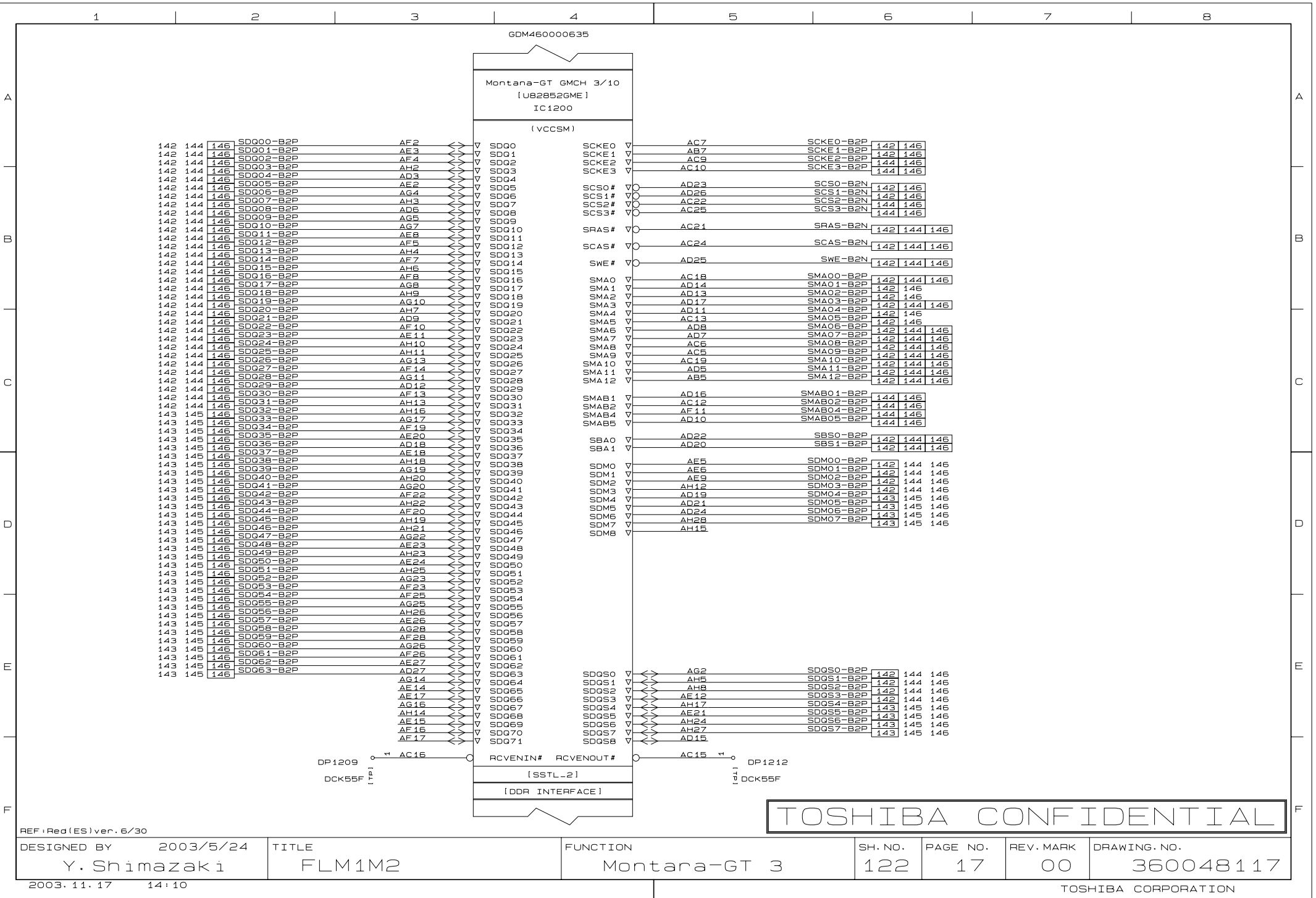
TOSHIBA CONFIDENTIAL

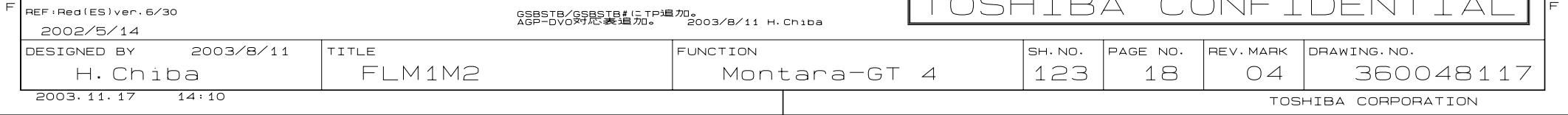
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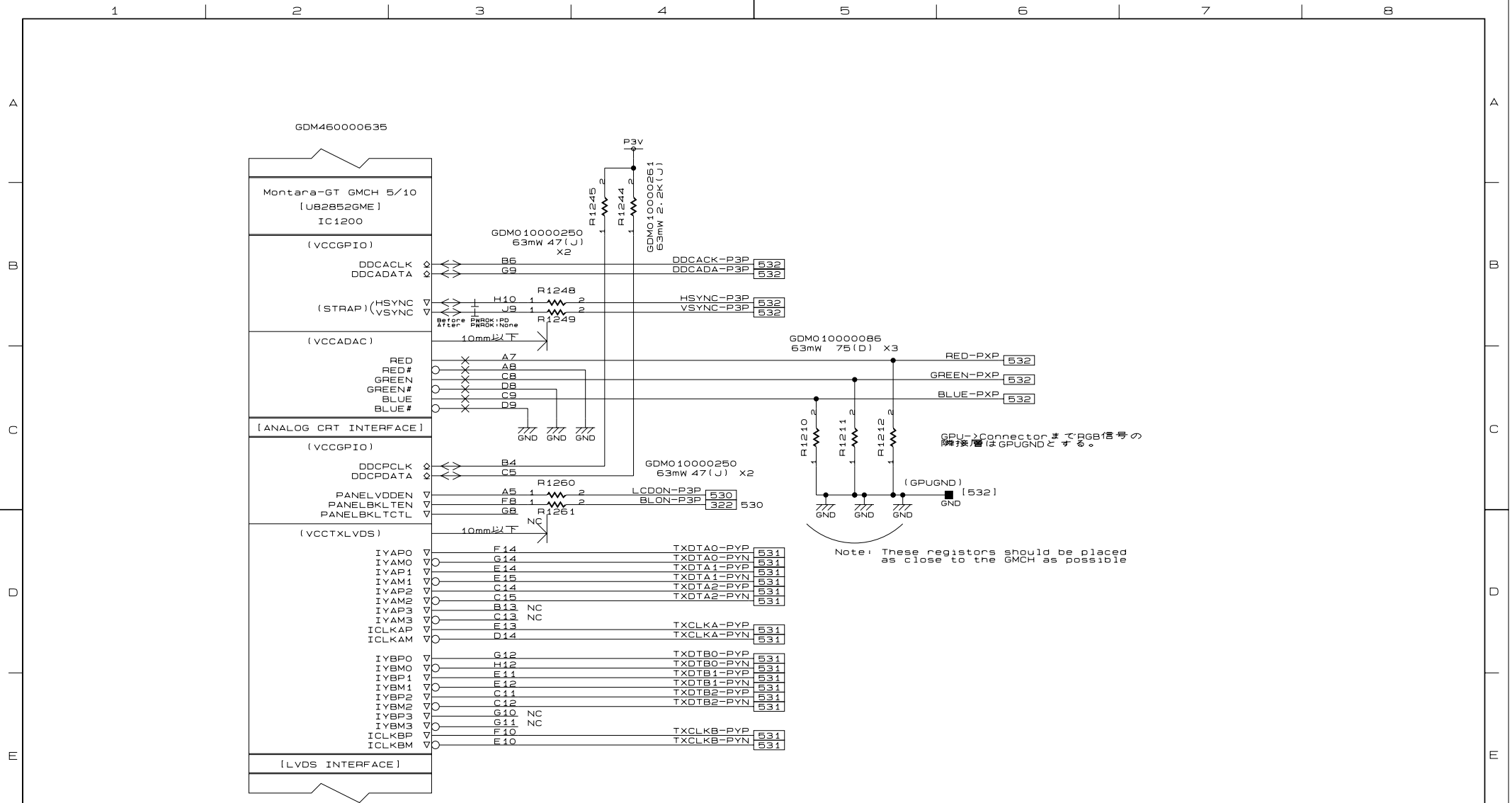
DESIGNED BY 2003/5/24
Y. ShimazakiTITLE
FLM1M2FUNCTION
Montara-GT 2SH. NO.
121PAGE NO.
16REV. MARK
00DRAWING NO.
360048117

2003. 11. 17 14:10

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ロケーションをLumos10Gに合わせる。
2003/8/14 Y. Shimazaki

IC1200をM-GTに変更。 2003/8/11 H. Chiba

REF:ASAHI VP(FASSM1) SH. 124

(DAC&LVDS I/F)

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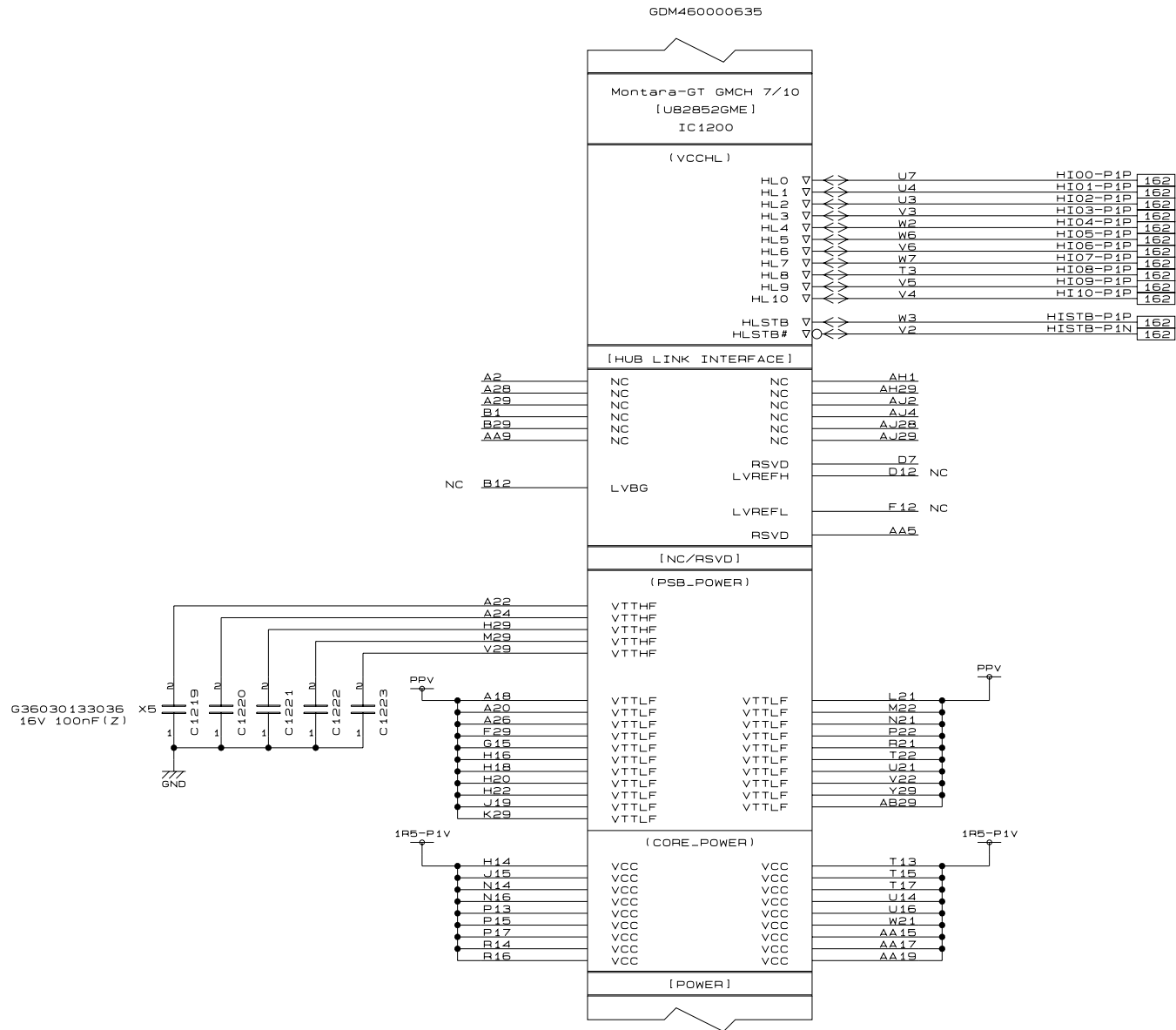
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2003/8/11 H. Chiba Y. Shimazaki	FLM1M2	Montara-GT 5	124	19	00	360048117

2003. 11. 17 14:10

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DRAWING. NO.
360048117



LVDS Test Pad削除。2003/07/30 H.Chiba

REF:Red(ES)ver.6/30

DESIGNED BY
2003/5/24 Y. Shimazaki
2002/8/8 H. Chiba

TITLE
FLM1M2

FUNCTION
Montara-GT 7

SH. NO.
126

PAGE NO.
21

REV. MARK
00

DRAWING. NO.
360048117

2003.11.17 14:10

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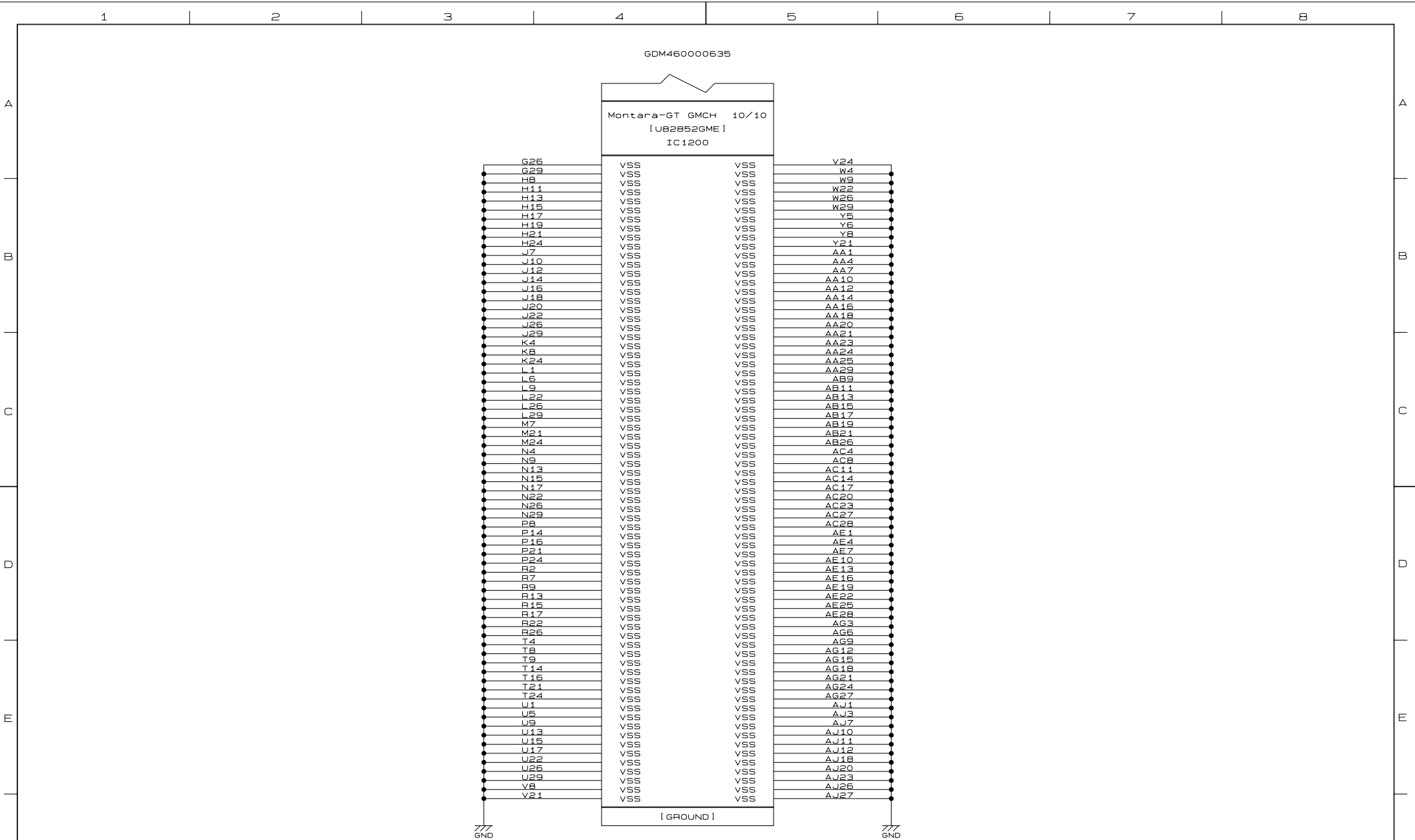
REF:HAWAII10 CS(HWISY1) SH. 128

2003/8/19 H. Chiba
Y. Shimazaki

2003. 11. 17 14:10

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DESIGNED BY 2003/8/19	H. Chiba Y. Shimazaki	TITLE FLM1M2	FUNCTION Montara-GT 9	SH. NO. 128	PAGE NO. 23	REV. MARK 00	DRAWING. NO. 360048117
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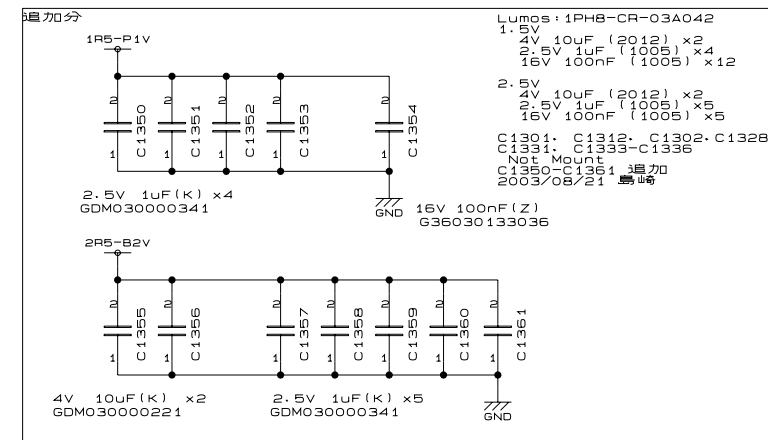
REF: Red(ES) ver. 6/30

DESIGNED BY	2003/5/24	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	Montara-GT 10	129	24	00	360048117

2003. 11. 17 14:10

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BGAのフットプリントから10mm以内に配置すること(10uF, 100nFはピン直傍)



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1 2 3 4 5 6 7 8

ROC. 1350

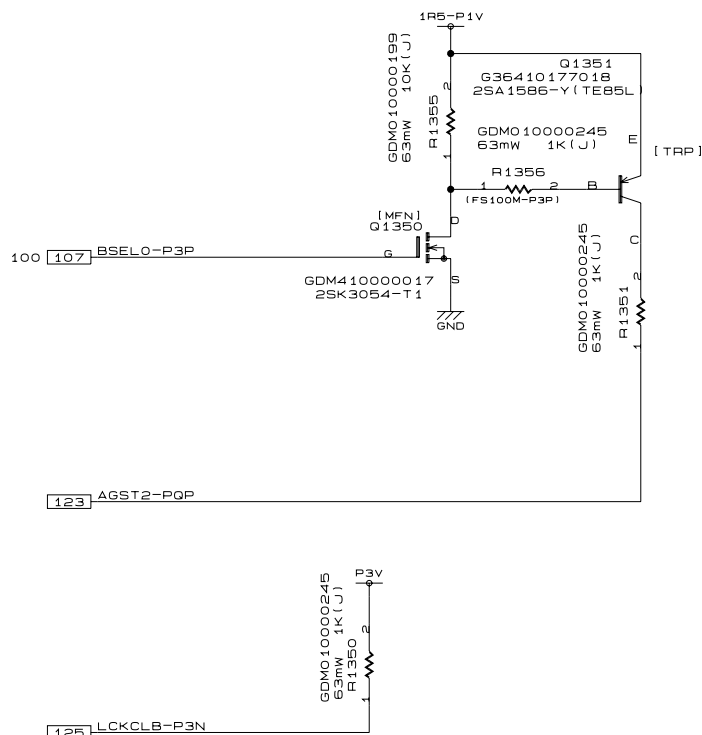
	L	H
LCLKCTRLB (def=L)	?	Mobile_P4 Mobile_Prescott Celeron
HSYNC (def=L)	Normal_Op.	XOR_test
VSNC (def=L)	Normal_Op.	AllZ_test
DVODETECT =GPAR (def=L)	DVO	AGP
SBA[7:0]	ADDID=no_default	
GST[2:0]	durling CPUST# internal pulled-down after CPUST# and C3/D1/D3 H1-Z	

GST[2:0]	PSB	MEM	GFX(L)	GFX(H)
000	400	266	133	200
001	400	200	100	200
010	400	200	100	133
011	400	266	133	266
100	533	266	133	200
101	533	266	133	266
110	533	333	166	266
111	400	333	166	250

FS[2:0]	CPUCLK
000	66
001	100
010	200
011	133

BSEL[1:0]	CPUCLK
00	(100MHz)
01	133MHz
10	(200MHz)
11	RESERVED

		LFM	HFM
Northwood	Volt	1.200V	1.550V
	VID	111010	101100
Prescott	Volt	1.150V	1.325V
	VID	111100	110101



Lumos10:内蔵Gfxなので、
AGPAR-PQP (DVODETECT)の
プルアップ抵抗削除。
2003/08/02 鳥嶋

Lumos10:内蔵Gfxのため、
AGST0、AGST1の行き先がない
ので、削除。
AGST2についてもCleanup。
2003/08/25 鳥嶋

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REF:Red(ES)ver. 6/30

DESIGNED BY 2003/5/24

Y. Shimazaki

TITLE

FLM1M2

FUNCTION

Montara-GT strap

SH. NO.

135

PAGE NO.

26

REV. MARK

00

DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION

	1	2	3	4	5	6	7	8
A	ROC. 1400							
B								
C	[04] 1PHS-CPE-03A040より RM1400-1415を削除。 (メモリー/Fはシリーズ抵抗無し) 2003/10/20 島崎							
D								
E								
F	TOSHIBA CONFIDENTIAL							

REF: Red(ES) ver. 6/30

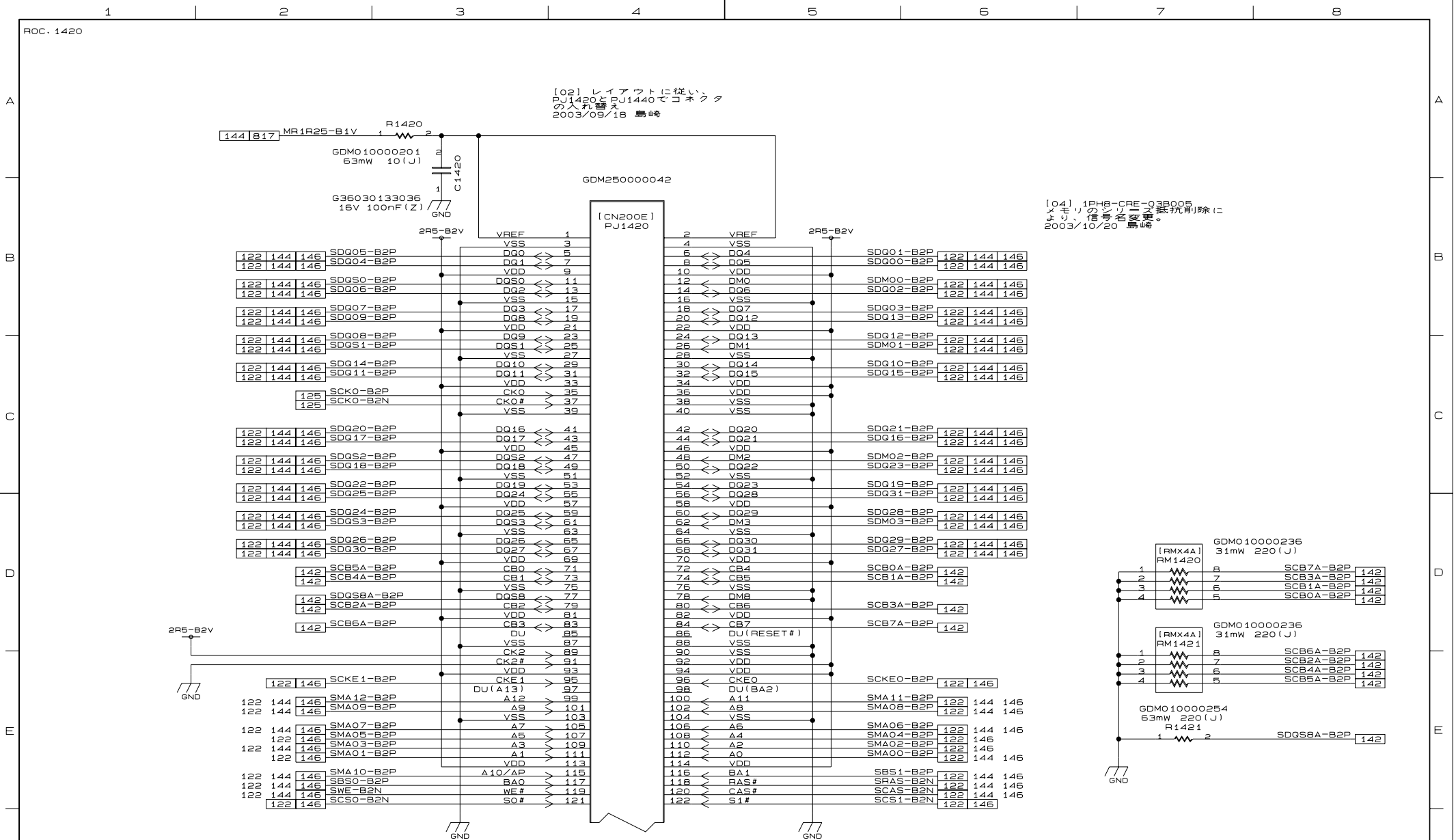
DESIGNED BY 2003/5/24 Y. Shimazaki		TITLE FLM1M2		FUNCTION DDR I/F Rs 1		SH. NO. 140	PAGE NO. 27	REV. MARK 04	DRAWING. NO. 360048117
2003. 11. 17 14:10					TOSHIBA CORPORATION				

[04] 1PH8-CRE-03A040より
W1400-1418. RM1416-1419を削除。
(メモリI/Fはシリーズ抵抗無し)
2003/10/20 島崎

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DESIGNED BY Y. Shimazaki	TITLE FLM1M2	FUNCTION DDR I/F Rs 2	SH. NO. 141	PAGE NO. 28	REV. MARK 04	DRAWING. NO. 360048117
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TOSHIBA CONFIDENTIAL

REF: Red(ES) ver. 6/30

DESIGNED BY 2003/5/24

Y. Shimazaki

TITLE

FLM1M2

FUNCTION

SO-DIMMO 1

SH. NO.

142

PAGE NO.

29

REV. MARK

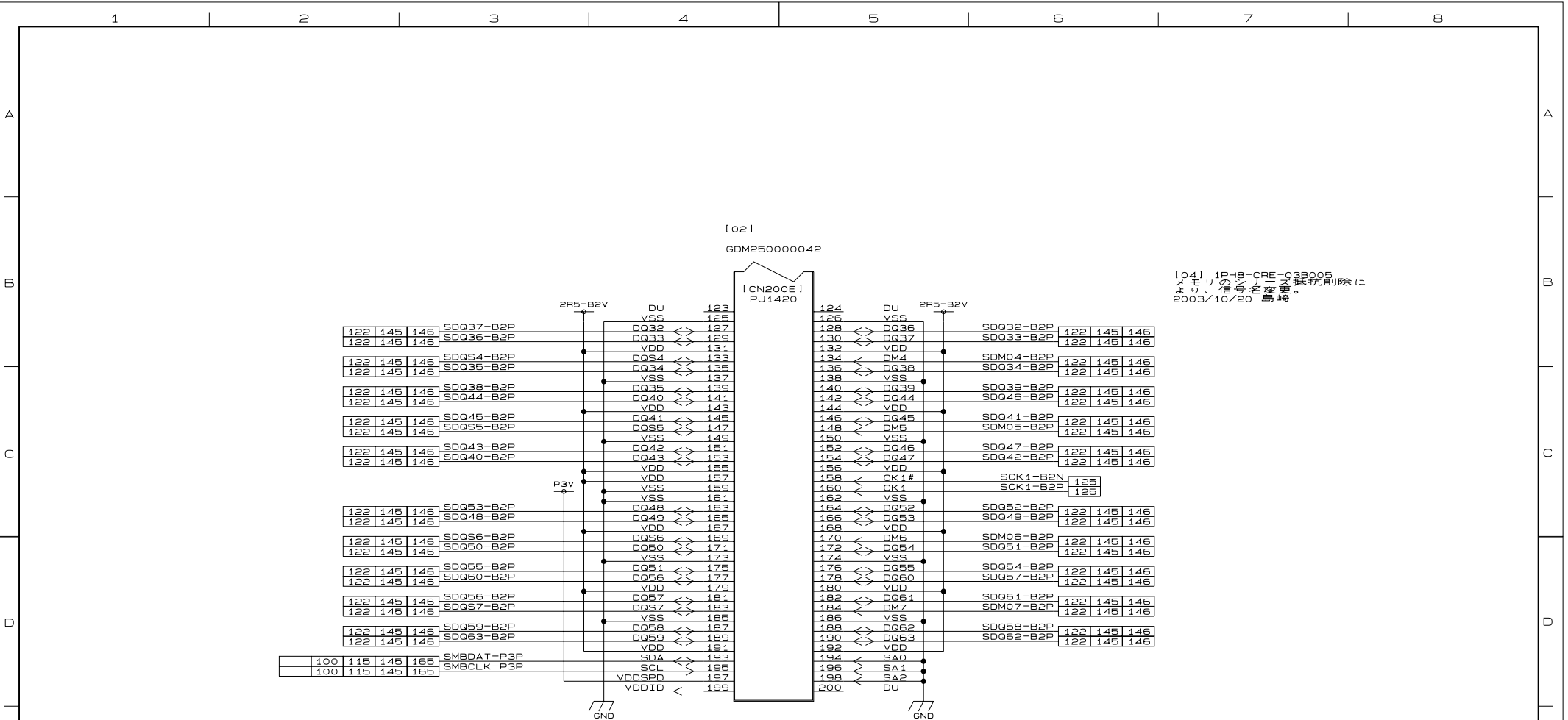
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DRAWING. NO.

360048117

2003. 11. 17 14:10

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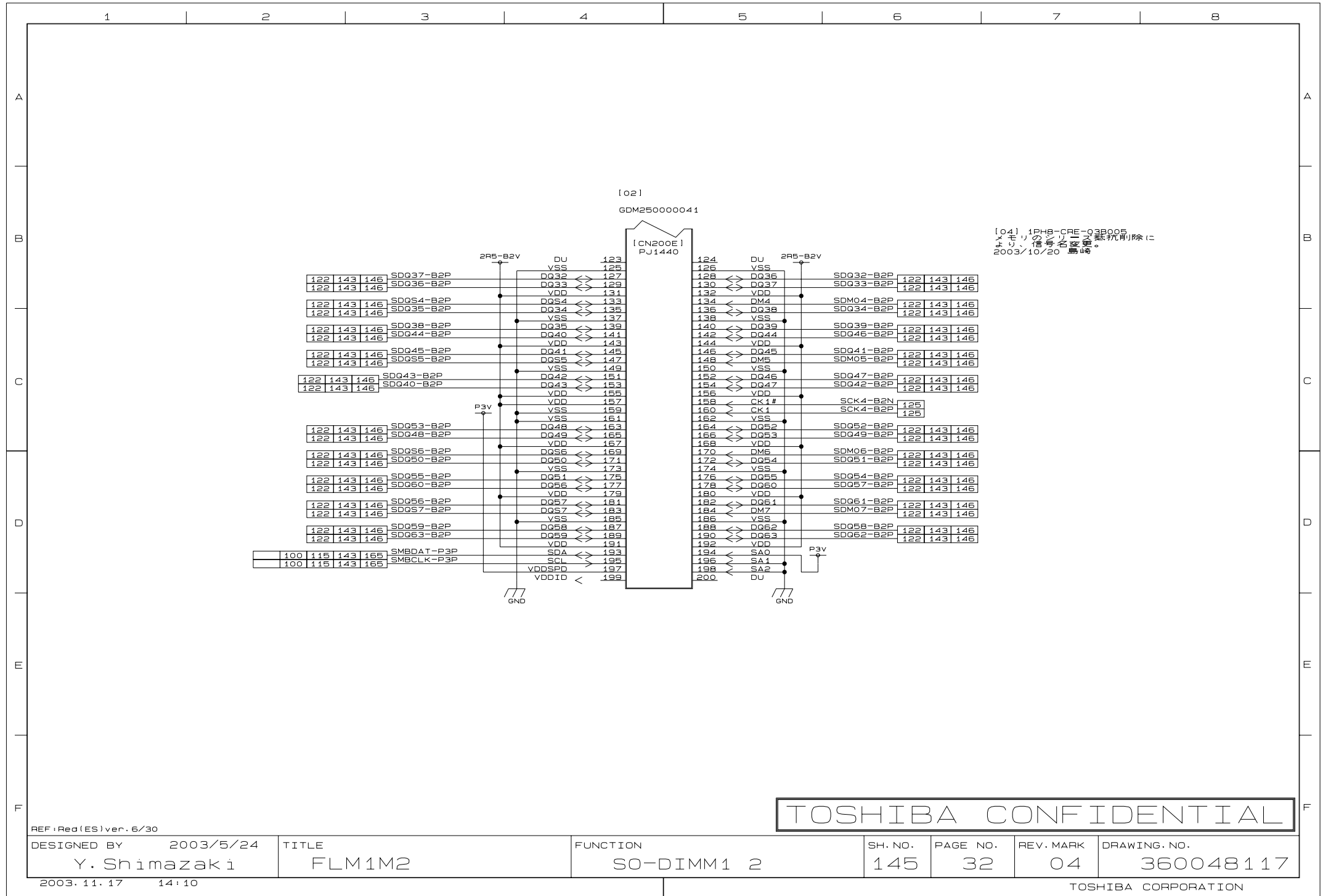
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DESIGNED BY	2003/5/24	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	SO-DIMMO 2	143	30	04	360048117

2003. 11. 17 14:10

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[04] 1PH8-CRE-03B005
メモリのシリーズ抵抗削除に
より、信号名変更。
2003/10/20 鳥嶋

TOSHIBA CONFIDENTIAL

REF: Red(ES) ver. 6/30

DESIGNED BY 2003/5/24
Y. Shimazaki

TITLE
FLM1M2

FUNCTION
SO-DIMM1 2

SH. NO.
145

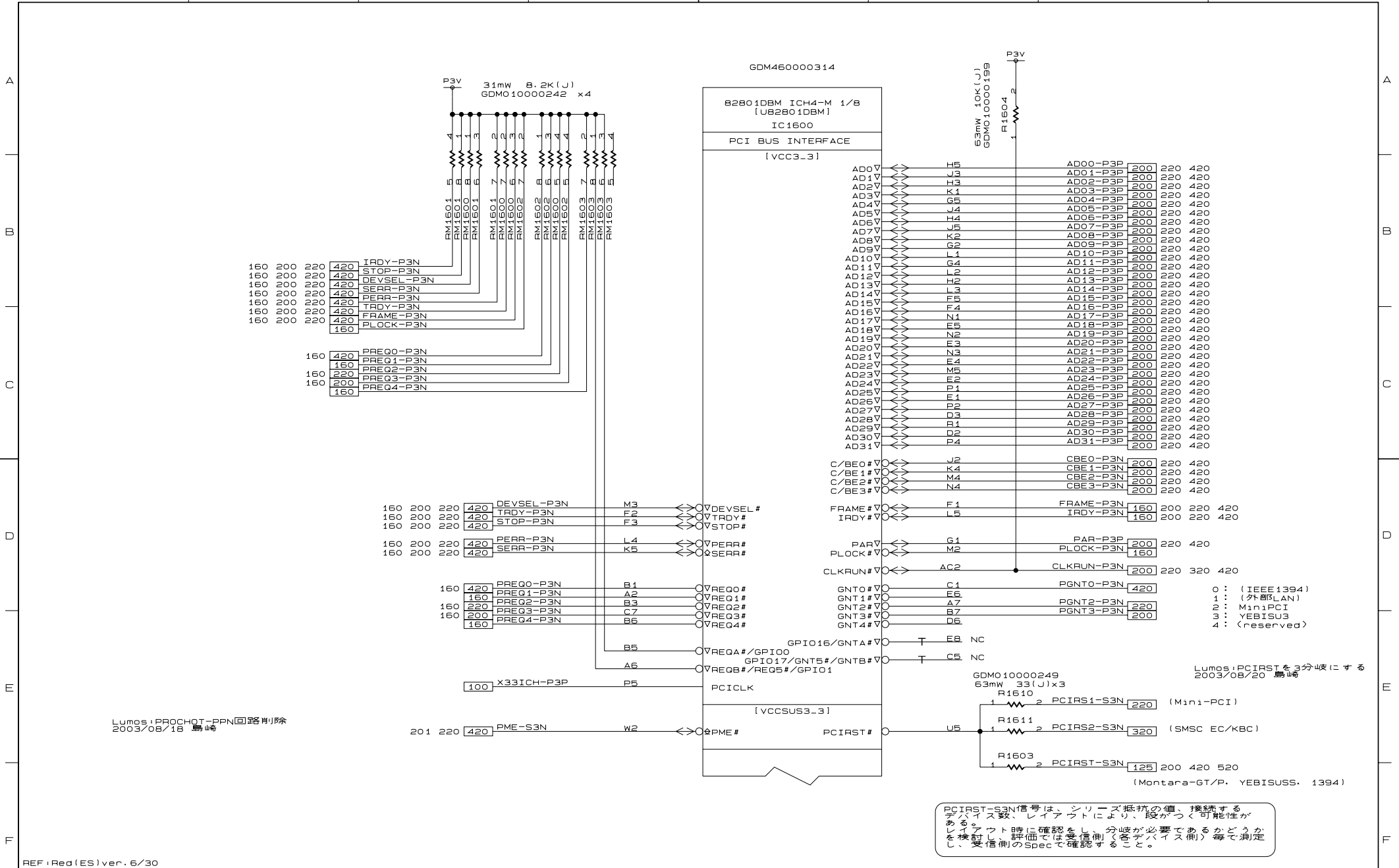
PAGE NO.
32

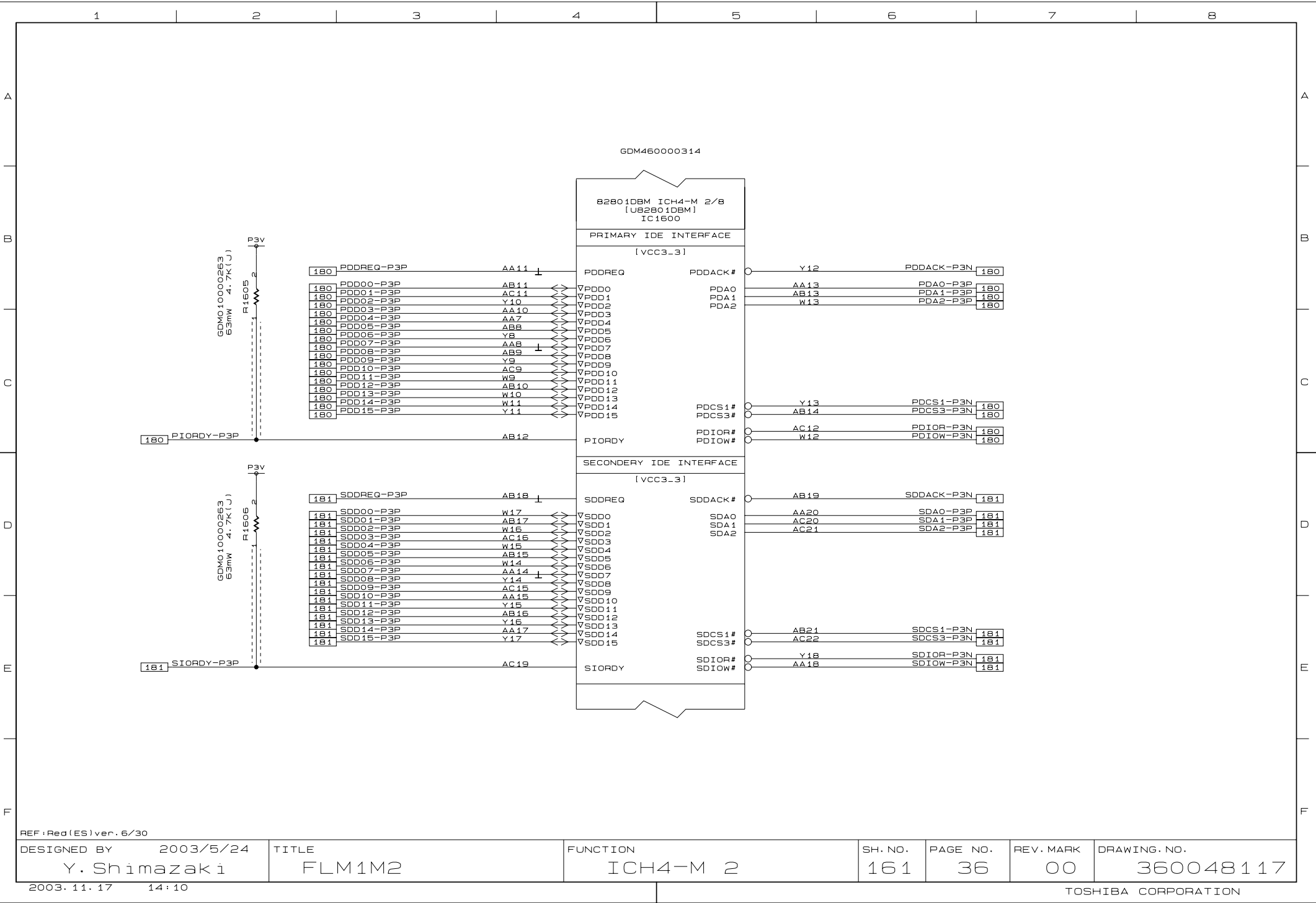
REV. MARK
04

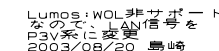
DRAWING. NO.
360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION







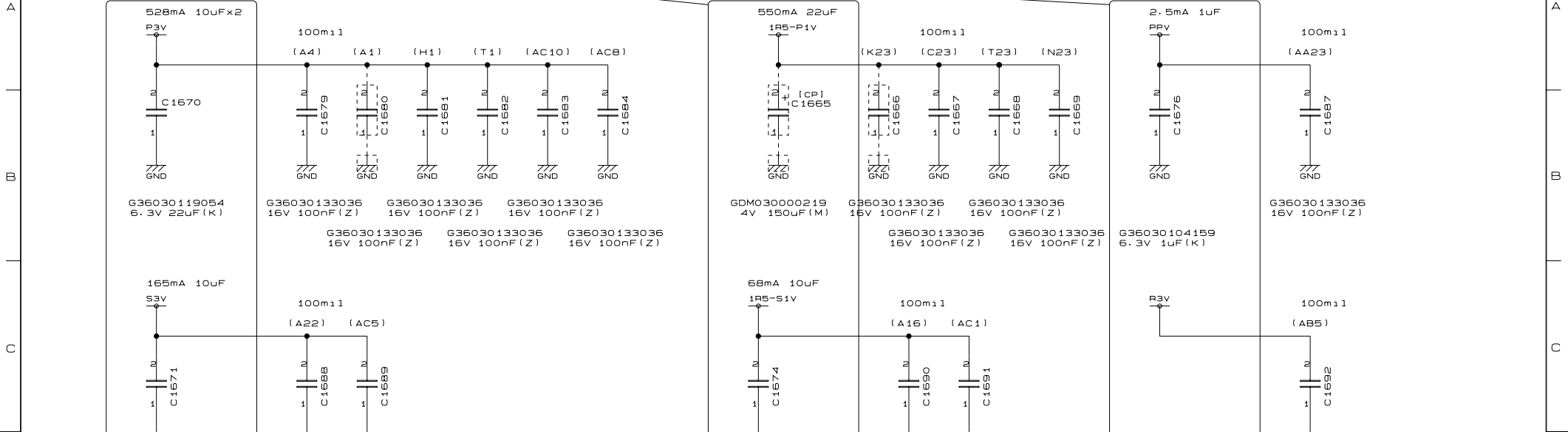




DRAWING. NO.

360048117

BGAのフットプリント以内に配置すること(100nFはピン直傍)



コード 定番	サイズ	EMP	最新価格
G36030133265 100nF, 10V, K, B	1005	0.5	0.4
G36030110999 100nF, 25V, Z, F	160B	0.3	0.3
G36030104159 1.0uF, 6.3V, K, B	160B	1.5	1.0
G36030109093 2.2uF, 10V, K, B	2012	2.7	2.1
GDM030000053 4.7uF, 4V, M, B	160B	15.0	7.5
G36030109161 4.7uF, 6.3V, K, B (CT)	2012	4.7	4.0
G36030029766 4.7uF, 6.3V, K, B (CM)	2012	4.5	3.4
G36030110020 4.7uF, 10V, K, B	3216	4.2	3.2
GDM030000019 10uF, 6.3V, M, B	2012	8.5	7.5
G36030110099 10uF, 6.3V, K, B	3216	6.9	11.0
G36030119054 22uF, 6.3V, K, B	3225	18.8	18.0
G36030046022 22uF, 10V, K, B	4532	17.1	29.0

REF : Red (ES) ver. 6/30

TITLE

FLM1M2

FUNCTION

ICH4-M 8

PAGE NO.

REV. MARK

DRAWING. NO.

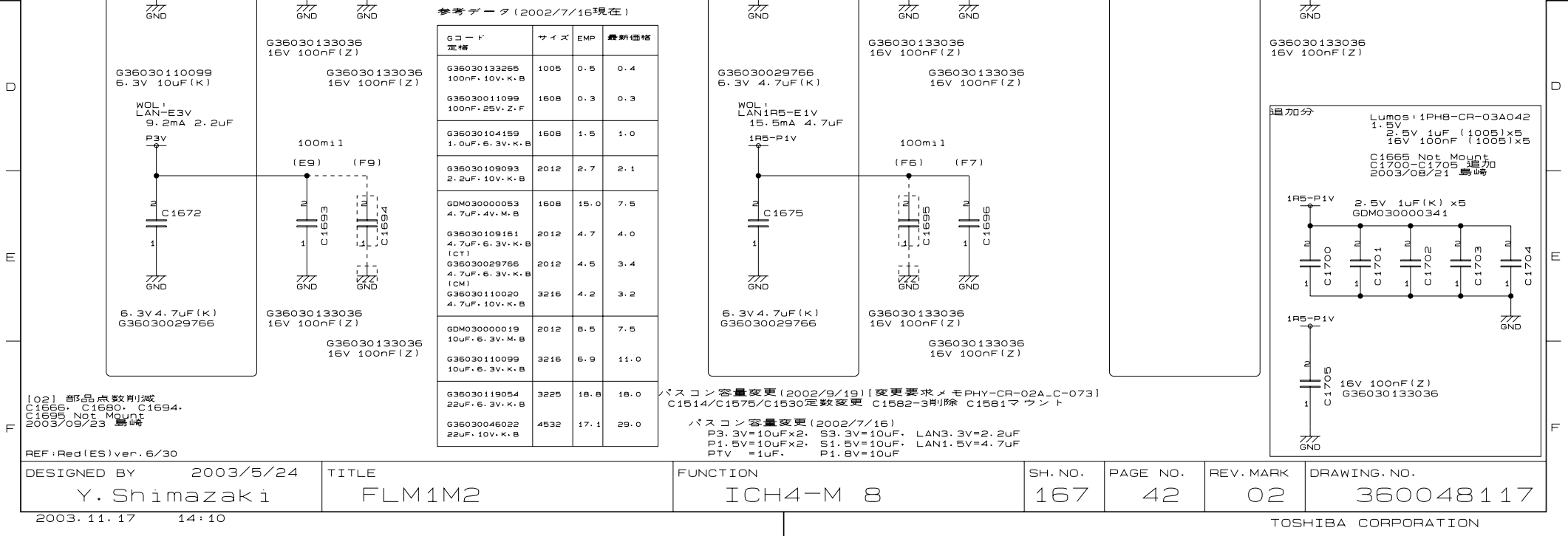
167

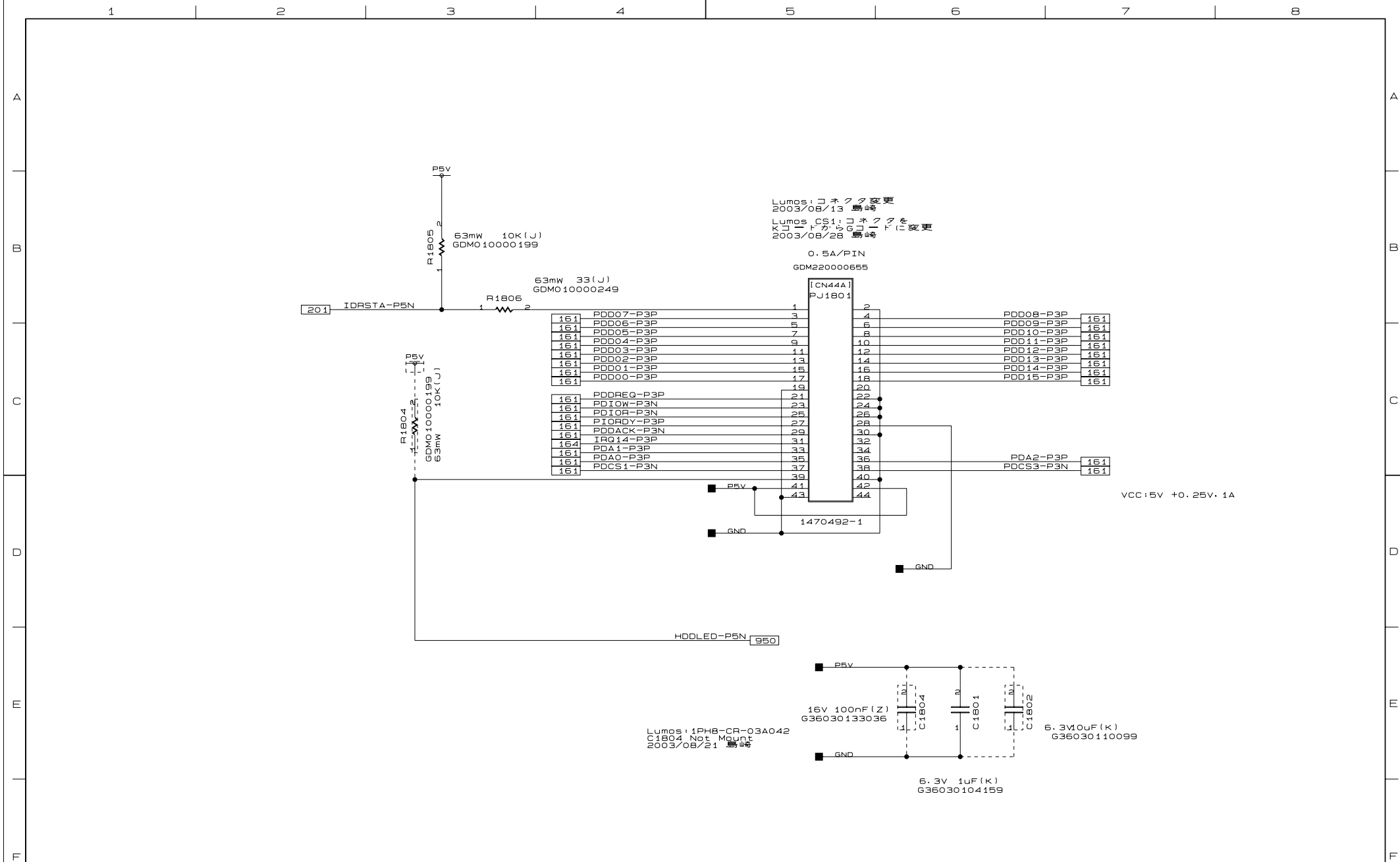
42

02

360048117

TOSHIBA CORPORATION





REF:Hangzhou (VP)

DESIGNED BY 2002/7/22

Y. Shimazaki

TITLE

FLM1M2

FUNCTION

HDD I/F

SH. NO.

180

PAGE NO.

43

REV. MARK

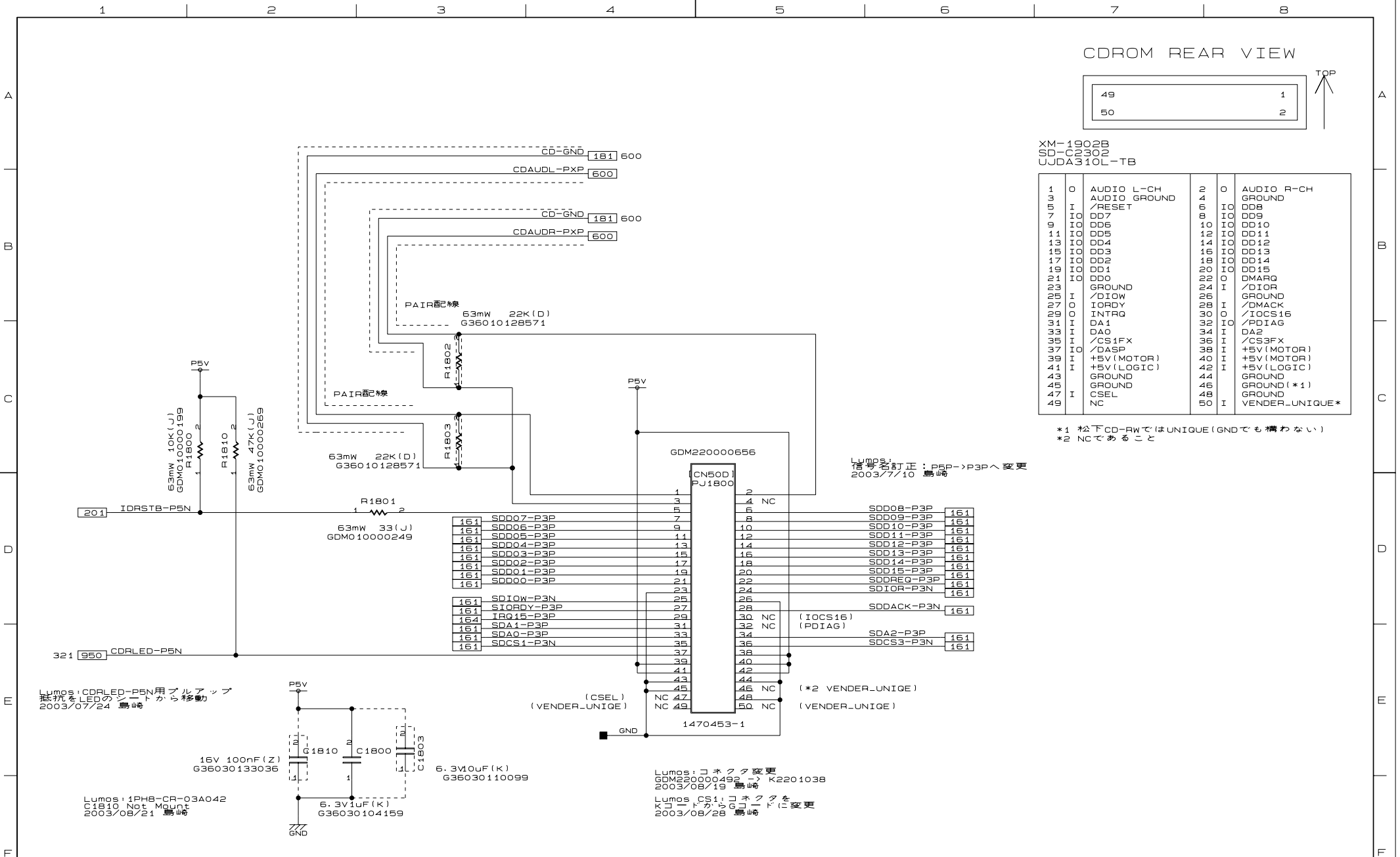
00

DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



DESIGNED BY 2002/8/14

Y. Shimazaki

TITLE

FLM1M2

FUNCTION

CD ROM I/F

SH. NO.

181

PAGE NO.

44

REV. MARK

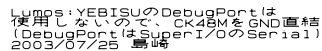
00

DRAWING. NO.

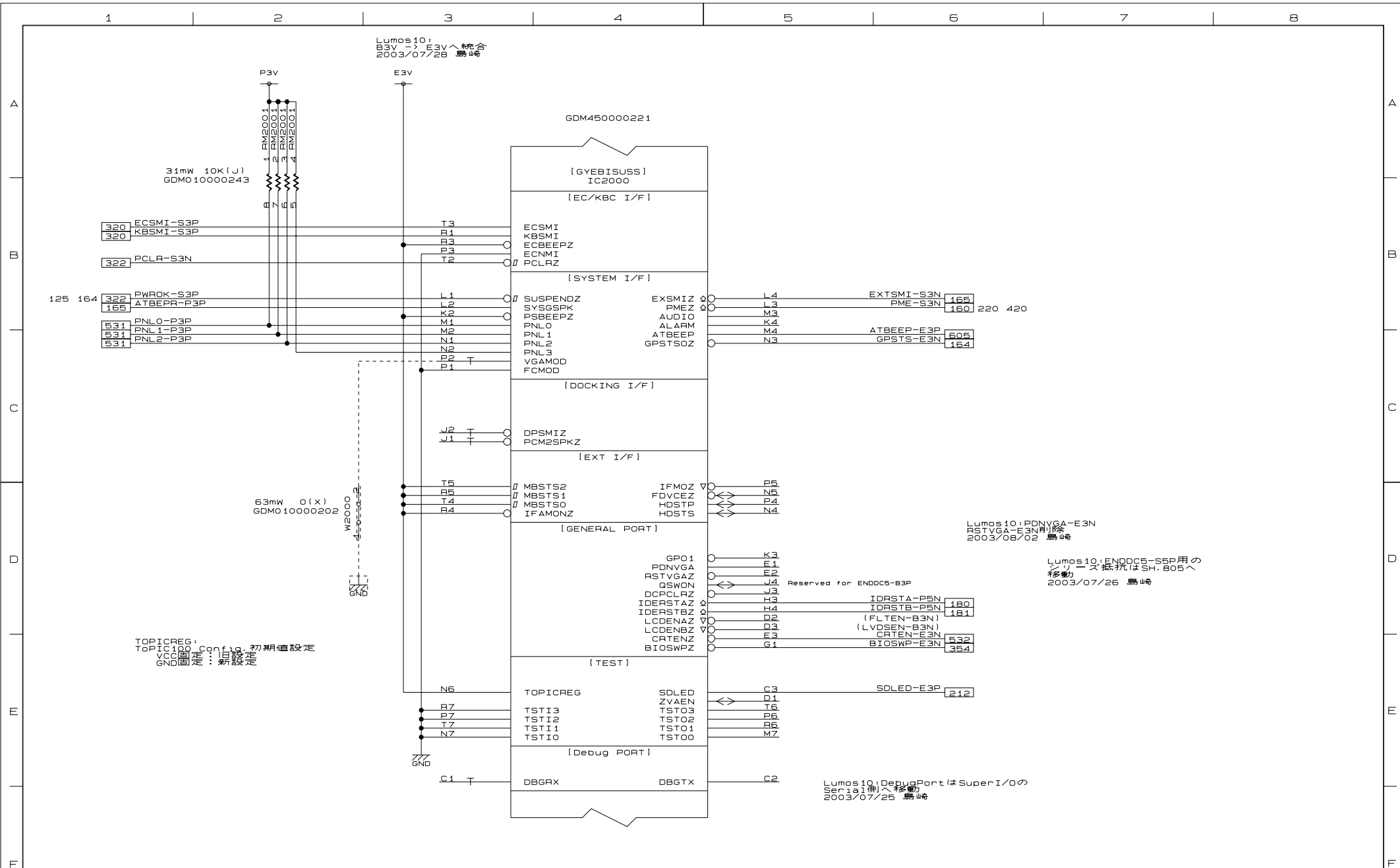
360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION

F

Lumos:SD Card 有り/無しモデルの
切り替えをIDSELで切り替えるように変更。
2003/08/14 島崎



REF: Red(ES) ver. 6/30

DESIGNED BY 2003/5/24

Y. Shimazaki

TITLE

FLM1M2

FUNCTION

YEBISUSS(2)

SH. NO.

201

PAGE NO.

46

REV. MARK

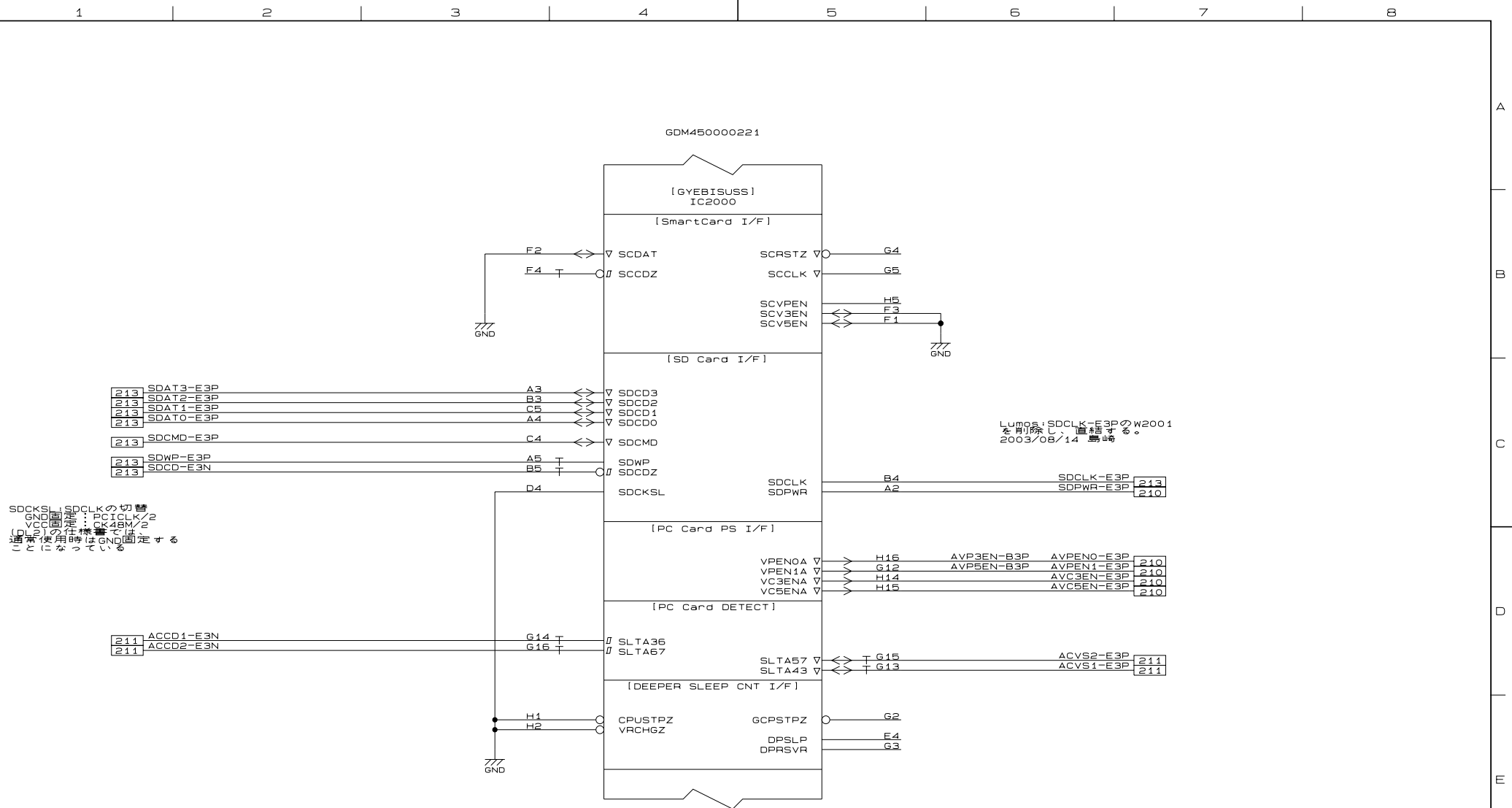
00

DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION

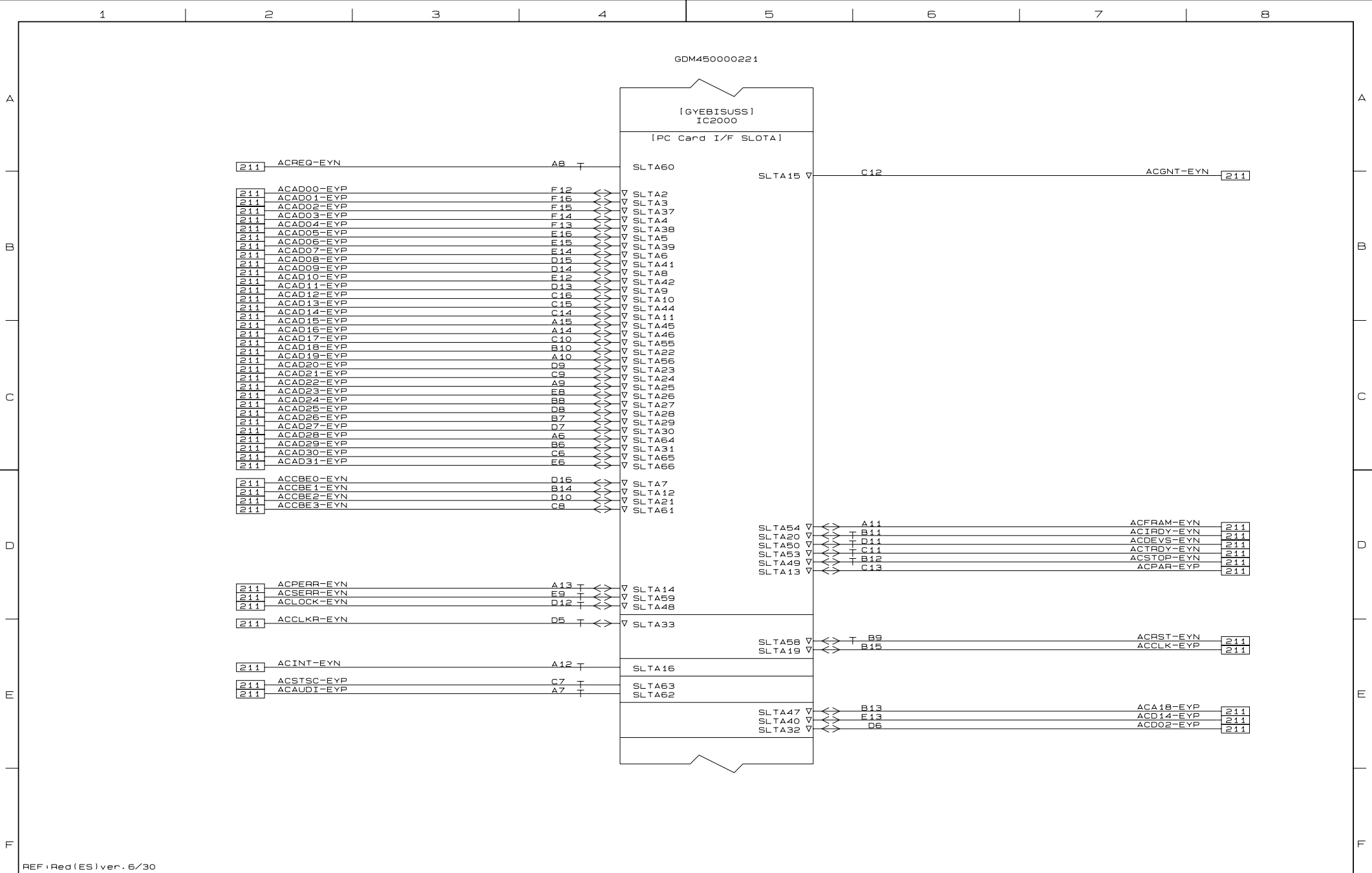


REF: Red(ES) ver. 6/30

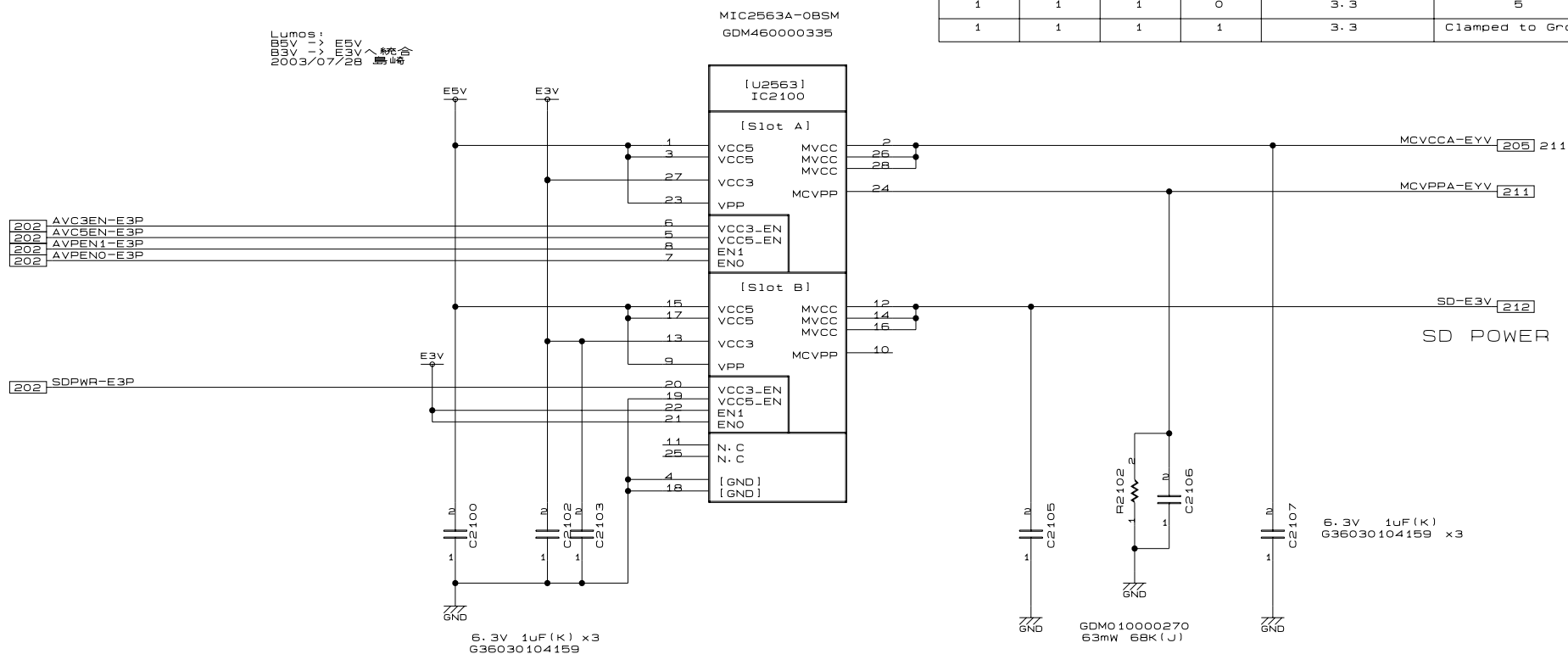
DESIGNED BY	2003/5/24	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	YEBISUSS(3)	202	47	00	360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



VCC5_EN	VCC3_EN	EN1	EN0	VCC OUT	VPP OUT
0	0	0	0	Clamped to Ground	High Z
0	0	0	1	Clamped to Ground	High Z
0	0	1	0	Clamped to Ground	High Z
0	0	1	1	Clamped to Ground	Clamped to Ground
0	1	0	0	3.3	High Z
0	1	0	1	3.3	3.3
0	1	1	0	3.3	12
0	1	1	1	3.3	Clamped to Ground
1	0	0	0	5	High Z
1	0	0	1	5	5
1	0	1	0	5	12
1	0	1	1	5	Clamped to Ground
1	1	0	0	3.3	High Z
1	1	0	1	3.3	3.3
1	1	1	0	3.3	5
1	1	1	1	3.3	Clamped to Ground



REF: Red(ES) ver. 6/30

DESIGNED BY 2003/5/24
Y. Shimazaki

TITLE	FLM1M2
-------	--------

FUNCTION	PC-Card POWER
----------	---------------

SH. NO.	210
---------	-----

PAGE NO.	50
----------	----

REV. MARK
00

DRAWING. NO.
360048117

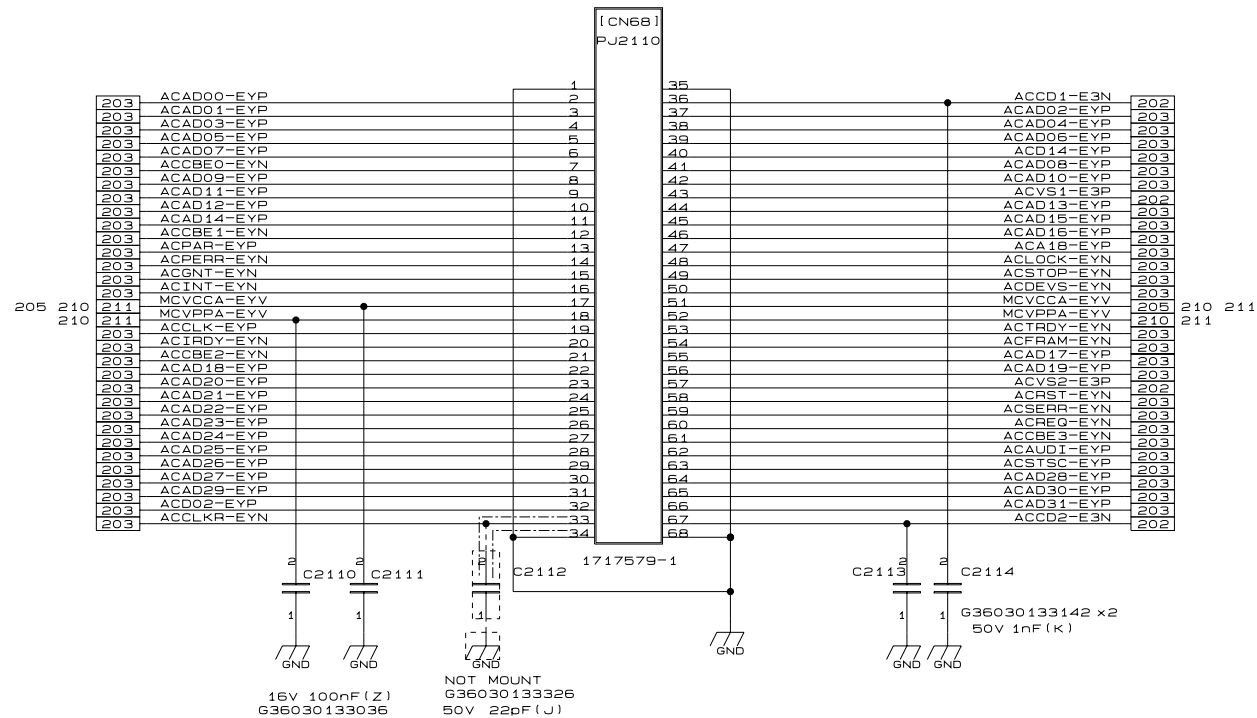
PJ2110 68PIN	GDM220000693 [04]
EJECTOR	GDM220000653

F

Lumos:確認済み。2003/08/16

[04] コネクタ変更
GDM220000658→GDM220000693
2003/10/21 島崎

GDM220000693

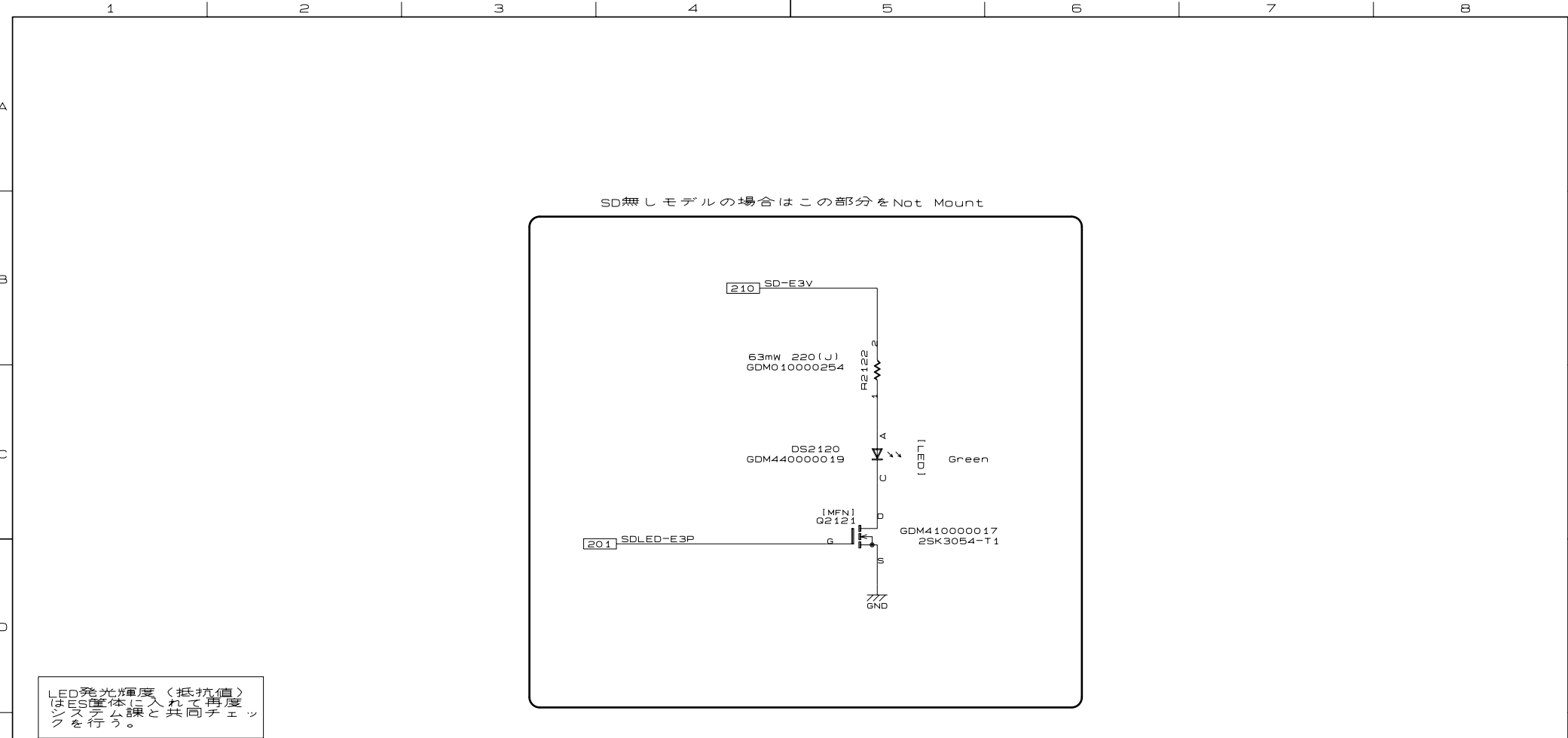


REF: Red(ES) ver. 6/30

DRAWING. NO.
360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



LED発光輝度（抵抗値）
はES筐体に入れて再度
システム線と共同チェッ
クを行う。

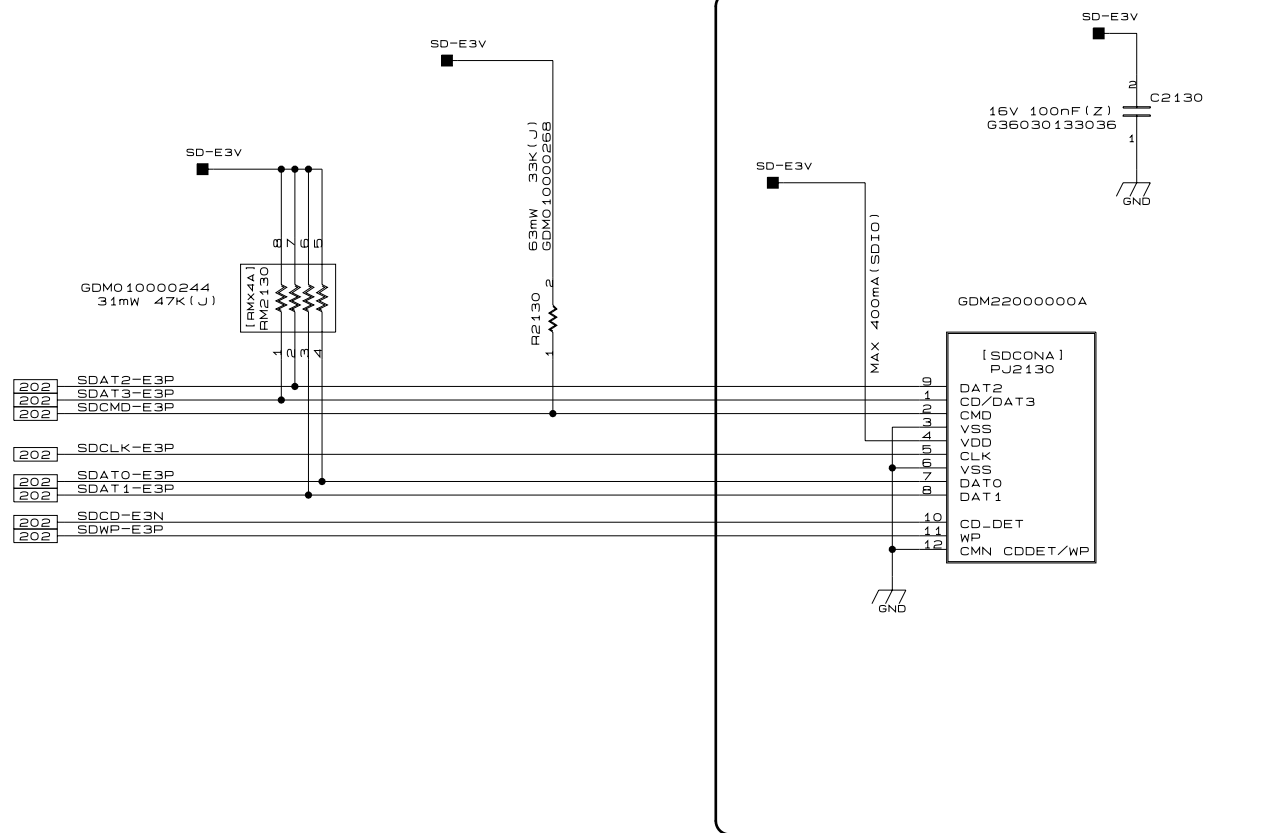
新LEDは逆耐圧 (Vr) = 4V

	色	波長	100%光度	設計値 (DC-IN...)	設計値 (MAIL/SD/BT)
従来	黄緑 (G)	565nm	32mcd at 20mA	6.4mA (20%)	
	黄 (Y)	585nm	16mcd at 20mA	4.4mA (15%)	
新規	TLGV	571nm	40mcd at 20mA	2.0mA → 1.5kohm	6.0mA → 220ohm (at 3.3V)
	TLVY	590nm	90mcd at 20mA	1.1mA → 2.7kohm	3.3mA → 1kohm

REF:Red(TS)

DESIGNED BY	2003/7/14	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	SD LED	212	52	00	360048117

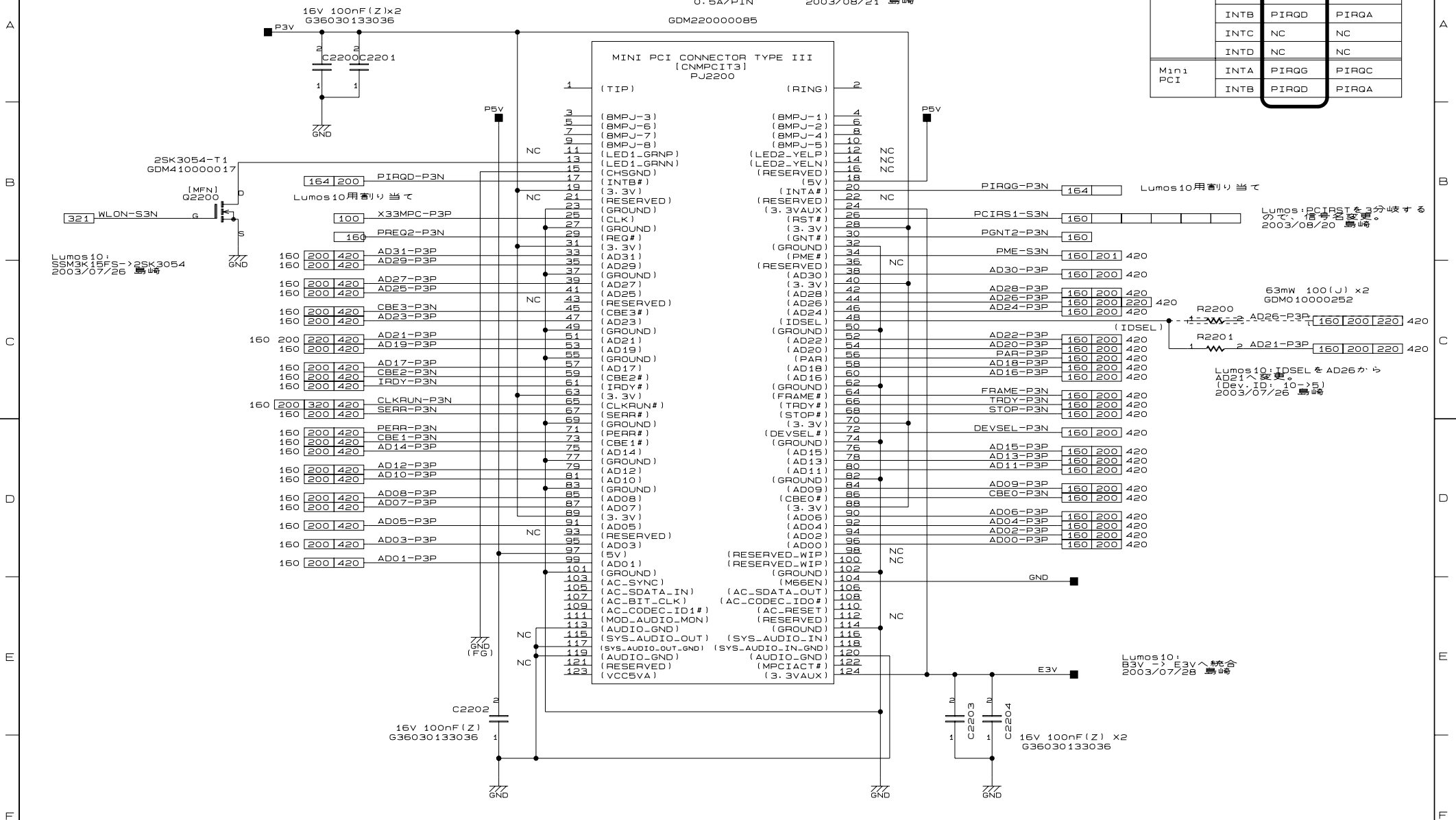
SD無しモデルの場合はこの部分をNot Mount



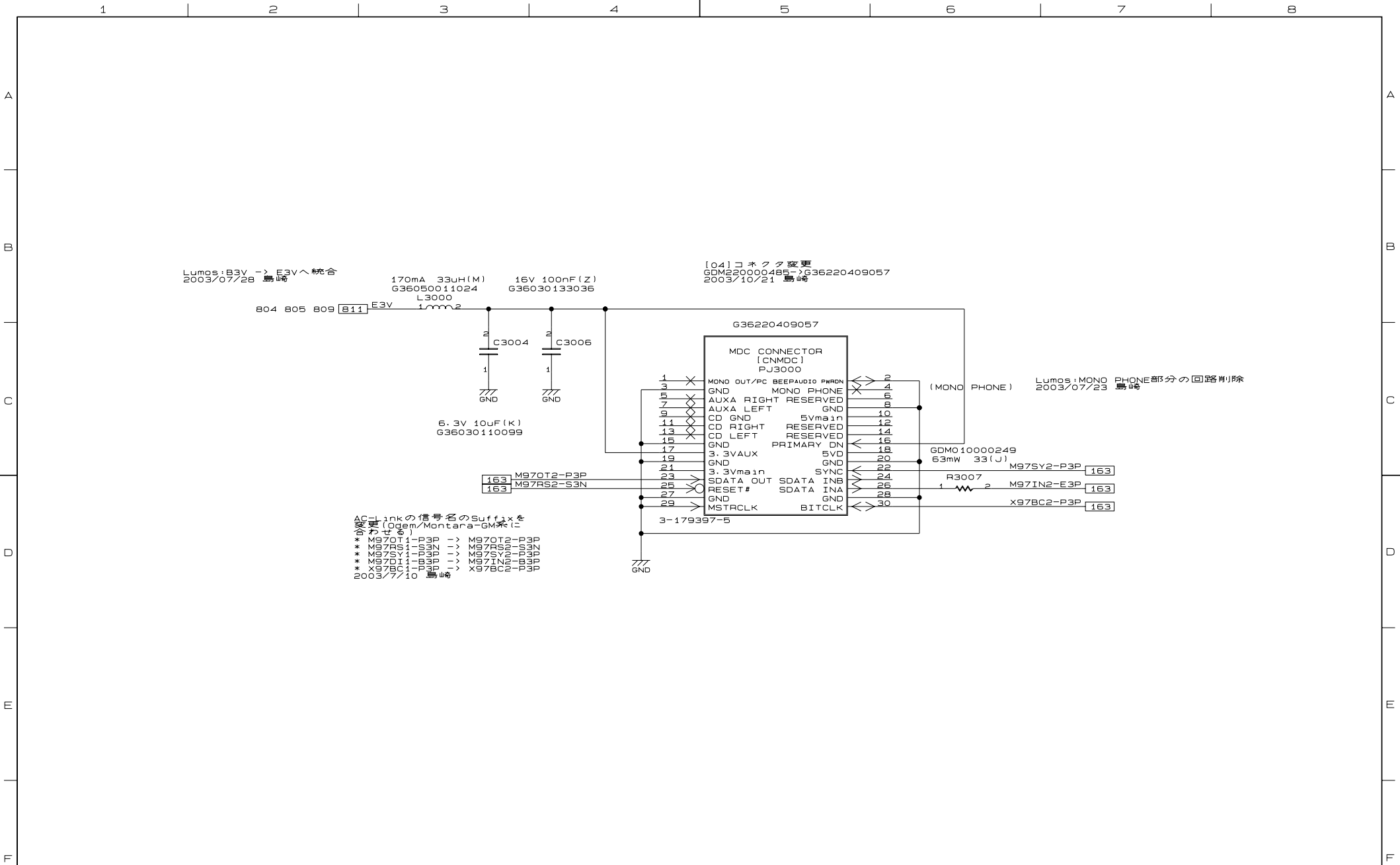
Lumos:コネクタ変更
GDM220000510 → G36220358010
2003/08/09 鳥崎

Lumos:コネクタ変更(二重登録品のため)
G36220358010 → GDM220000085
2003/08/21 鳥崎

		Lumos 10	Lumos 100
YEBISU	INTA	PIRQC	PIRQD
	INTB	PIRQD	PIRQA
	INTC	NC	NC
	INTD	NC	NC
Mini PCI	INTA	PIRQG	PIRQC
	INTB	PIRQD	PIRQA



DESIGNED BY	2002/10/8	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	MINI PCI I/F	220	54	00	360048117
2003.11.17	14:10			TOSHIBA CORPORATION			



REF:Hayate10(VP)

DESIGNED BY	2003/3/13	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	MDC I/F	301	55	04	360048117

2003. 11. 17 14:10

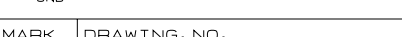
TOSHIBA CORPORATION

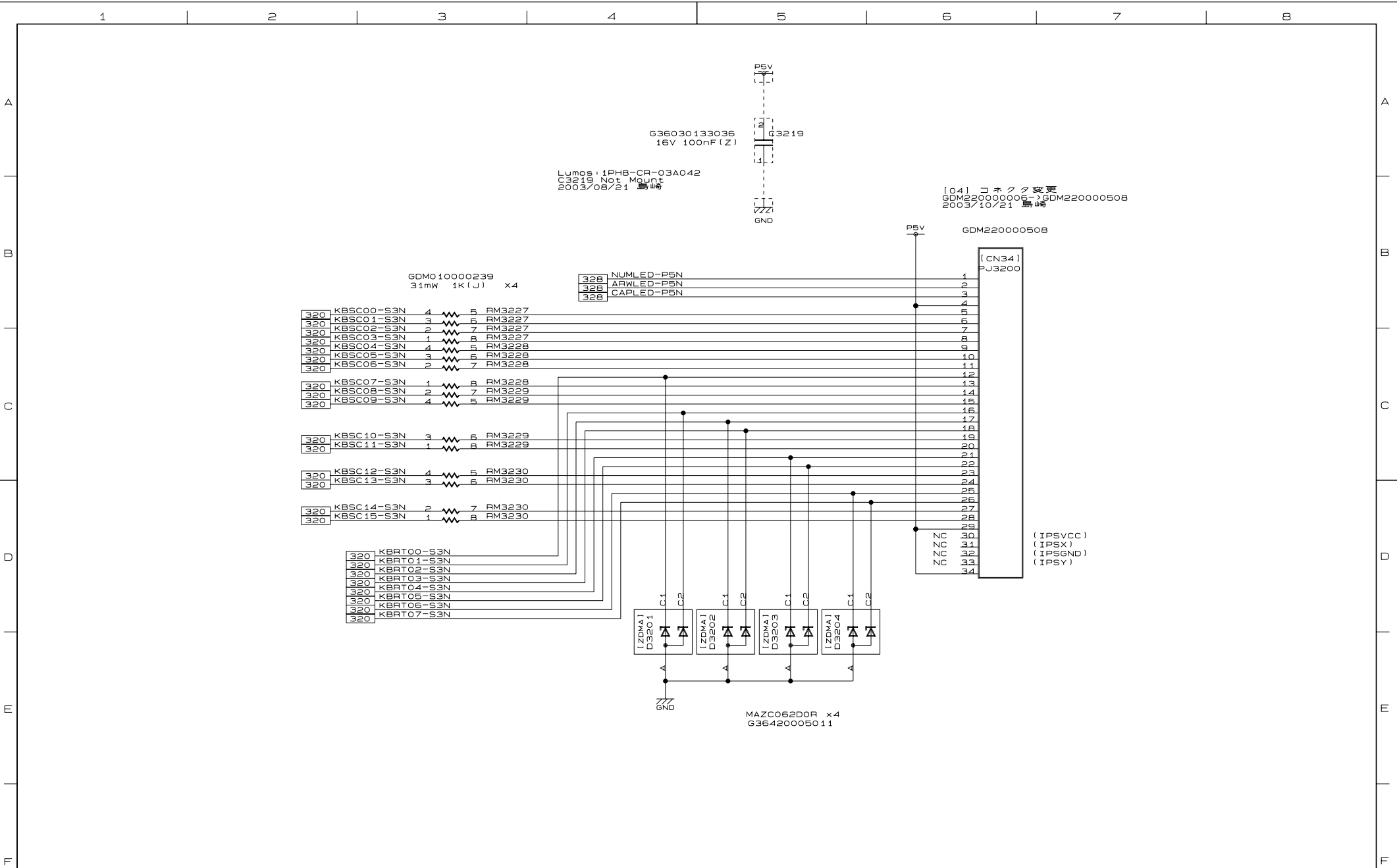


TOSHIBA CORPORATION









REF:Asahi10(VP)

DESIGNED BY 2003/4/28
Y. Shimazaki

TITLE
FLM1M2

FUNCTION
KB I/F

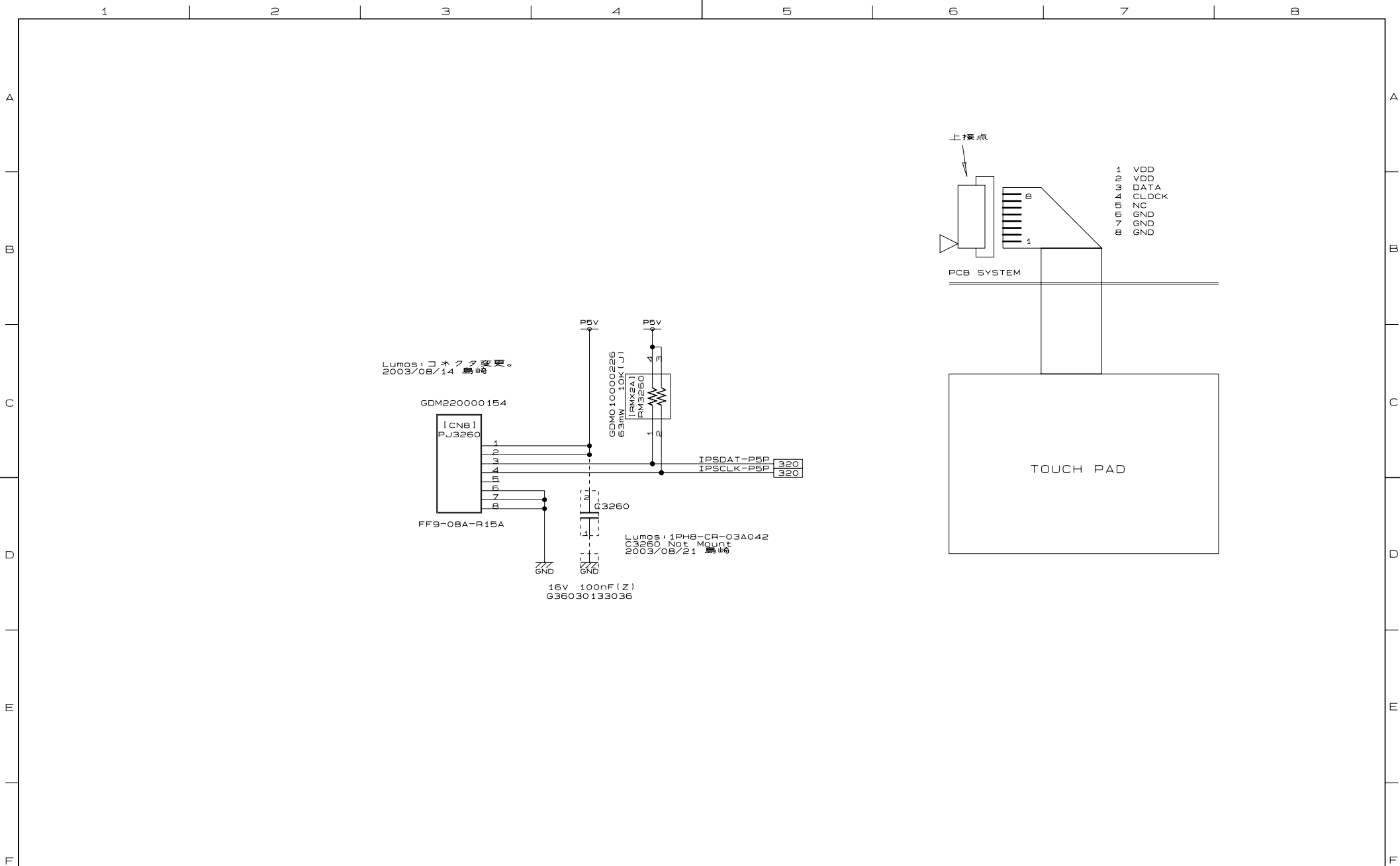
SH. NO.
325

PAGE NO.
61

REV. MARK
04

DRAWING. NO.
360048117

2003. 11. 17 14:10

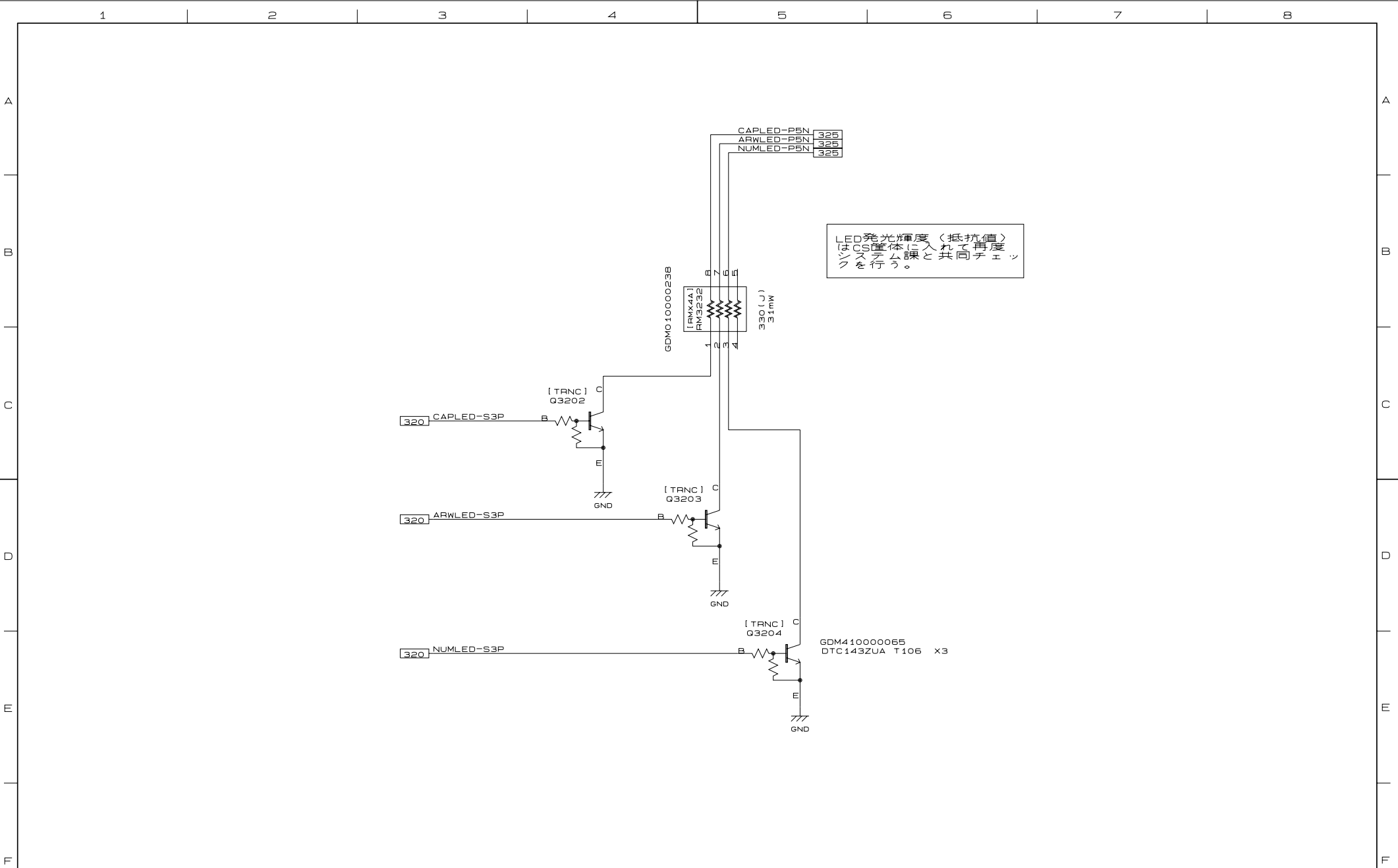


REF: Hangzhou10 (VP)

DESIGNED BY 2002/1/15
Y. ShimazakiTITLE
FLM1M2FUNCTION
PAD IFSH. NO.
326PAGE NO.
62REV. MARK
00DRAWING NO.
360048117

2003. 11. 17 14:10

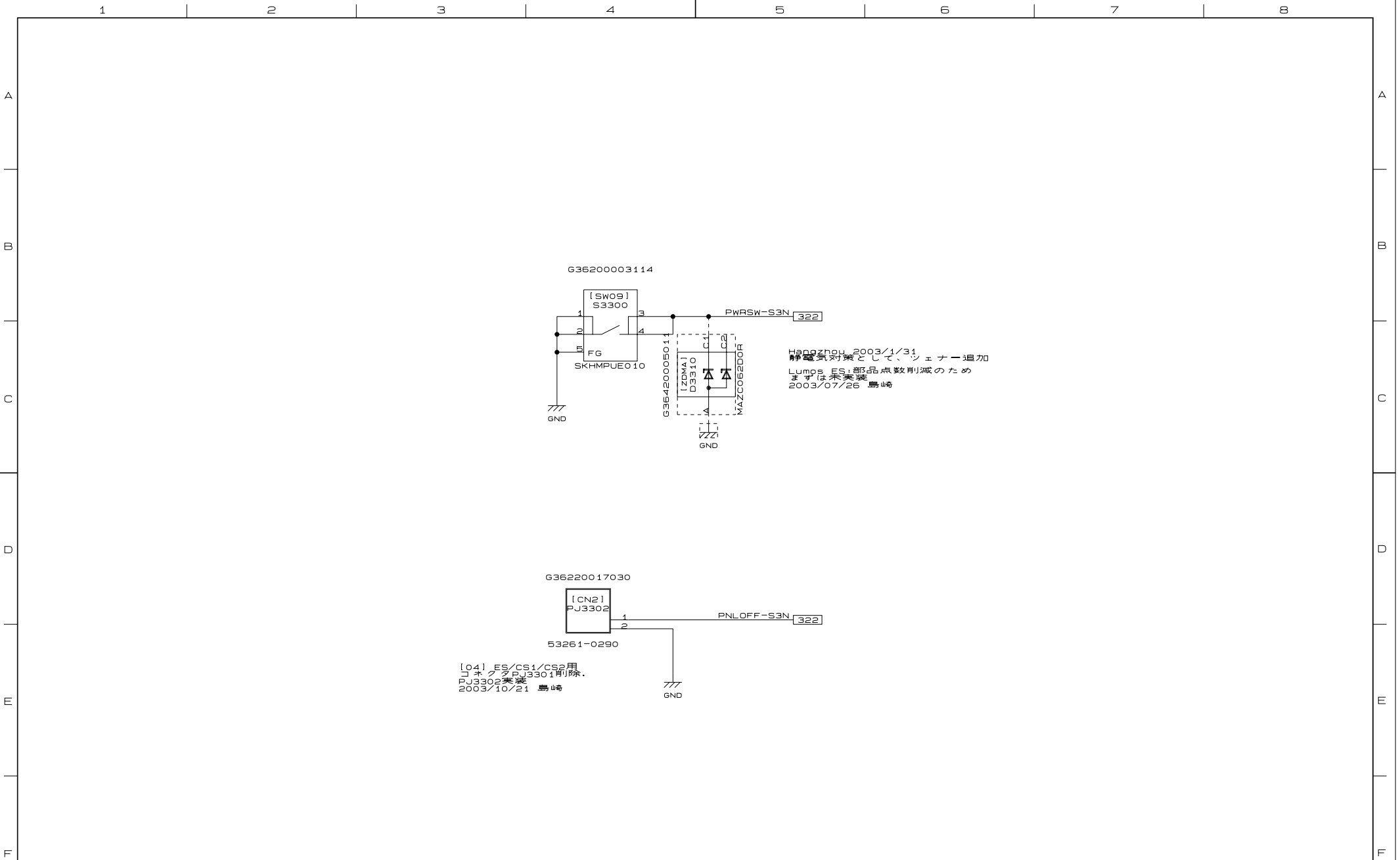
TOSHIBA CORPORATION



REF: Asahi10 (VP)

DESIGNED BY	2002/3/6	TITLE	FLM1M2	FUNCTION	KB LED	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki						328	63	00	360048117

2003. 11. 17 14:10

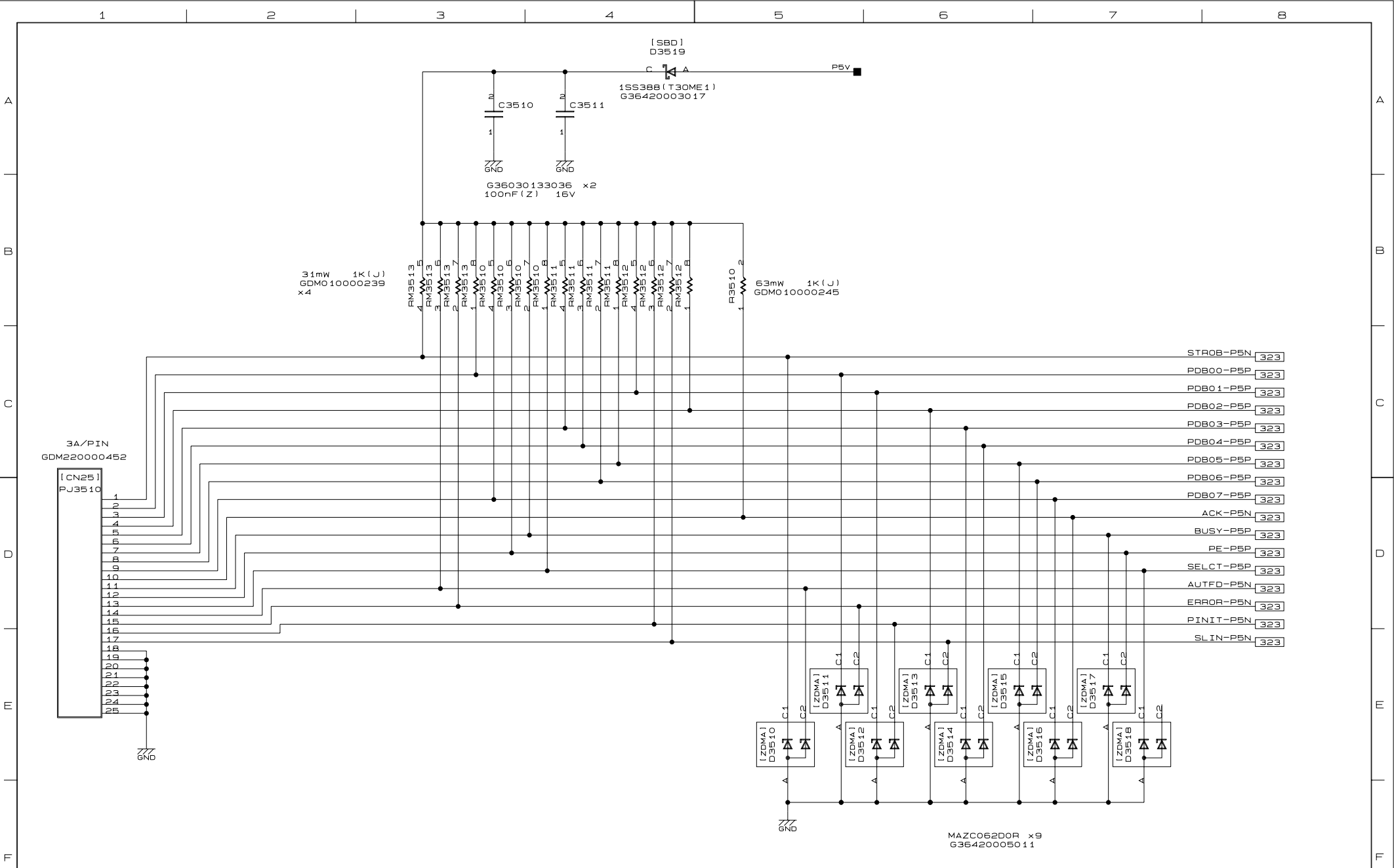


REF: Hangzhou10 (VP)

DESIGNED BY	2002/10/18	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	POWER SWITCH	331	64	04	360048117

2003. 11. 17 14:10

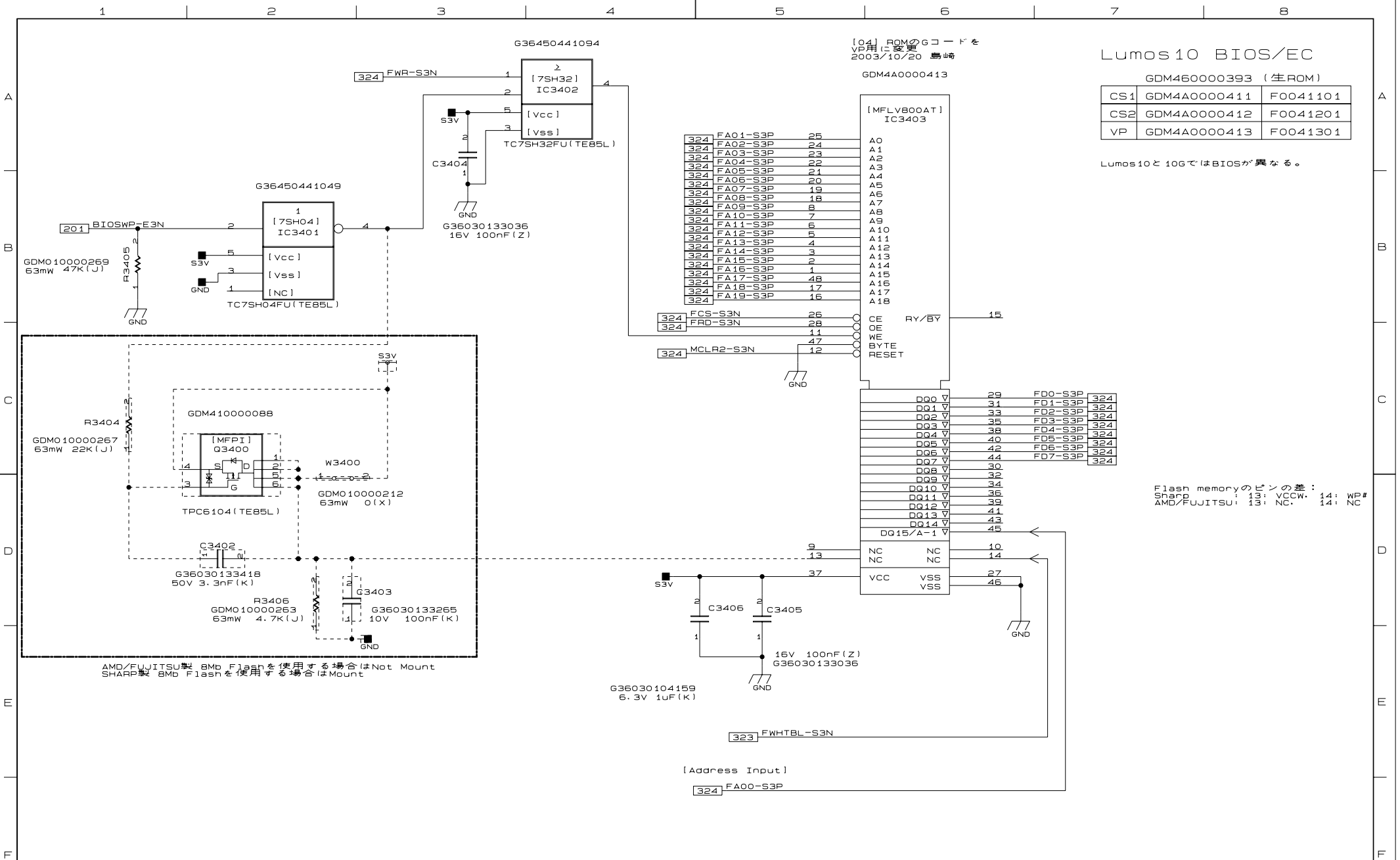
TOSHIBA CORPORATION

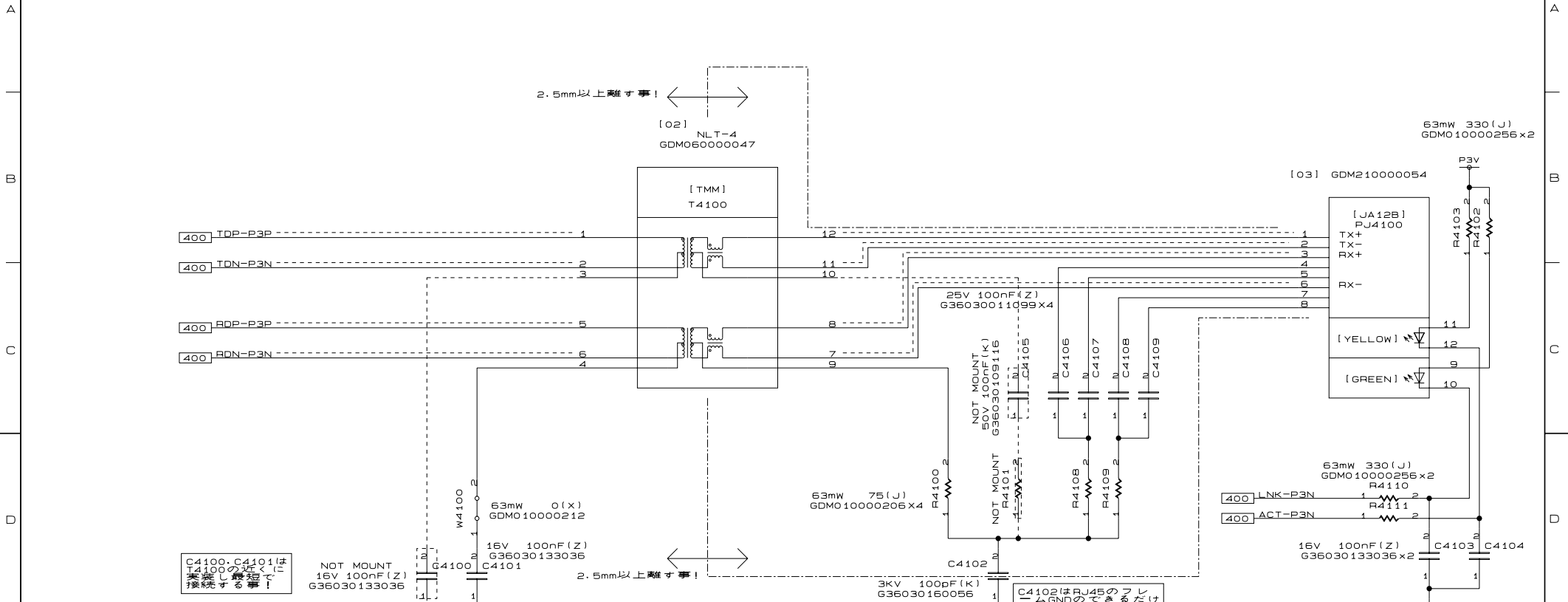


REF: Hayate10 (VP)

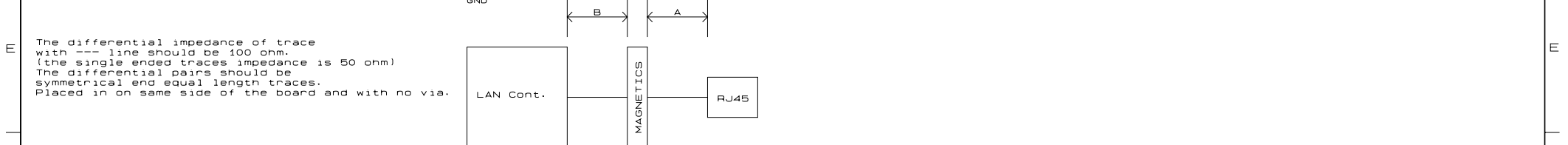
DESIGNED BY	2003/2/22	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	PARALLEL I/F	351	65	00	360048117

2003. 11. 17 14:10

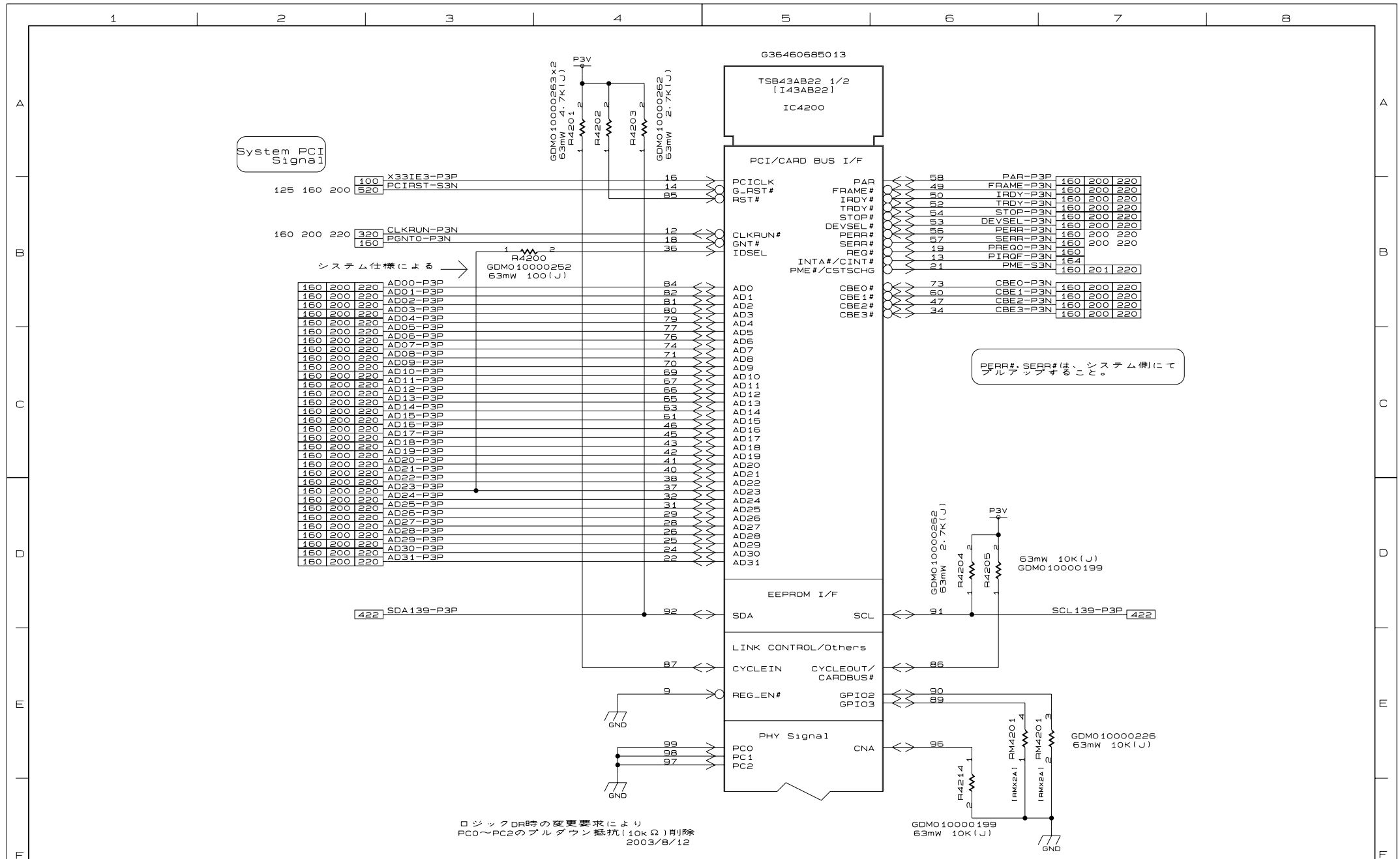




The differential impedance of trace with --- line should be 100 ohm.
(the single ended traces impedance is 50 ohm)
The differential pairs should be symmetrical and equal length traces.
Placed in on same side of the board and with no via.

[illegible]

Distance B should also be designed to extend less than one inch between device.



ロジック DR時の変更要求により
PC0~PC2のプルダウン抵抗(10kΩ)削除
2003/8/12

DESIGNED BY 2003/8/12

K. Uchida

TITLE

FLM1M2

FUNCTION

1394 PHY/LINK(1)

SH. NO.

420

PAGE NO.

69

REV. MARK

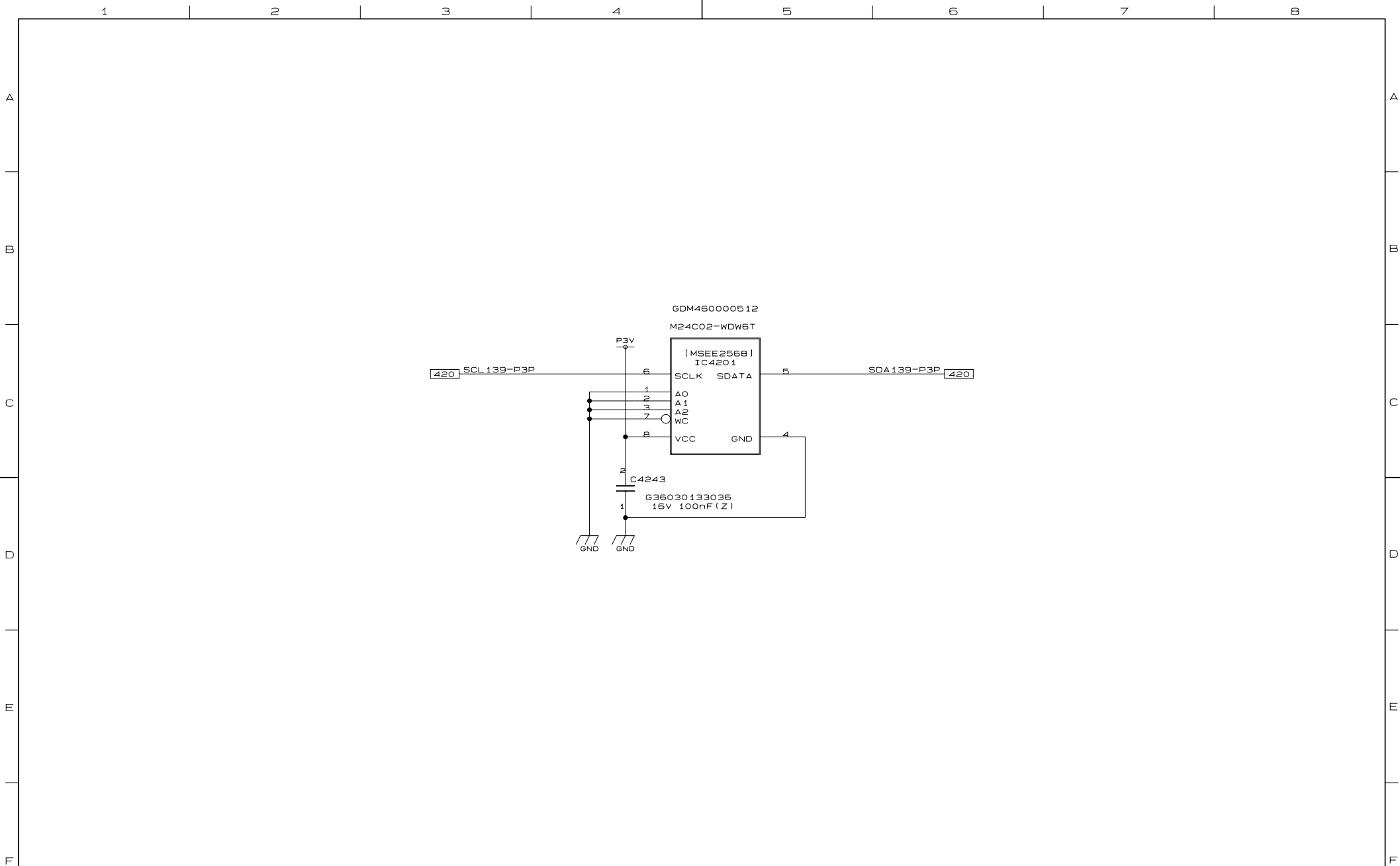
00

DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



DESIGNED BY 2003/7/3
K. Uchida

TITLE
FLM1M2

FUNCTION
1394 EEPROM

SH. NO.
422

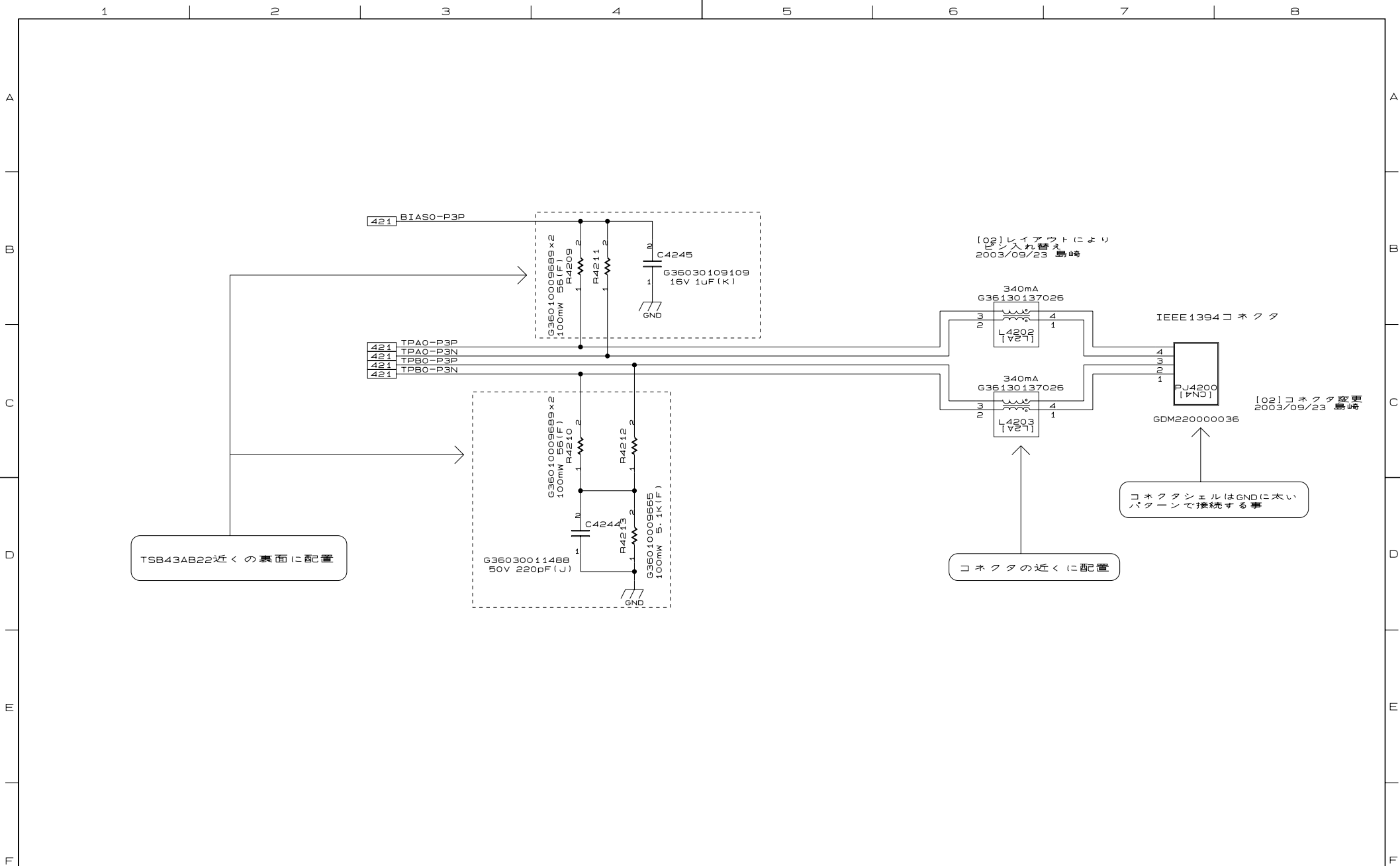
PAGE NO.
71

REV. MARK
00

DRAWING. NO.
360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



DESIGNED BY 2003/7/3
K. Uchida

TITLE
FLM1M2

FUNCTION
1394 I/F

SH. NO.
423

PAGE NO.
72

REV. MARK
02

DRAWING. NO.
360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION

1

2

3

4

5

6

7

8

A

B

C

D

E

F

A

B

C

D

E

F

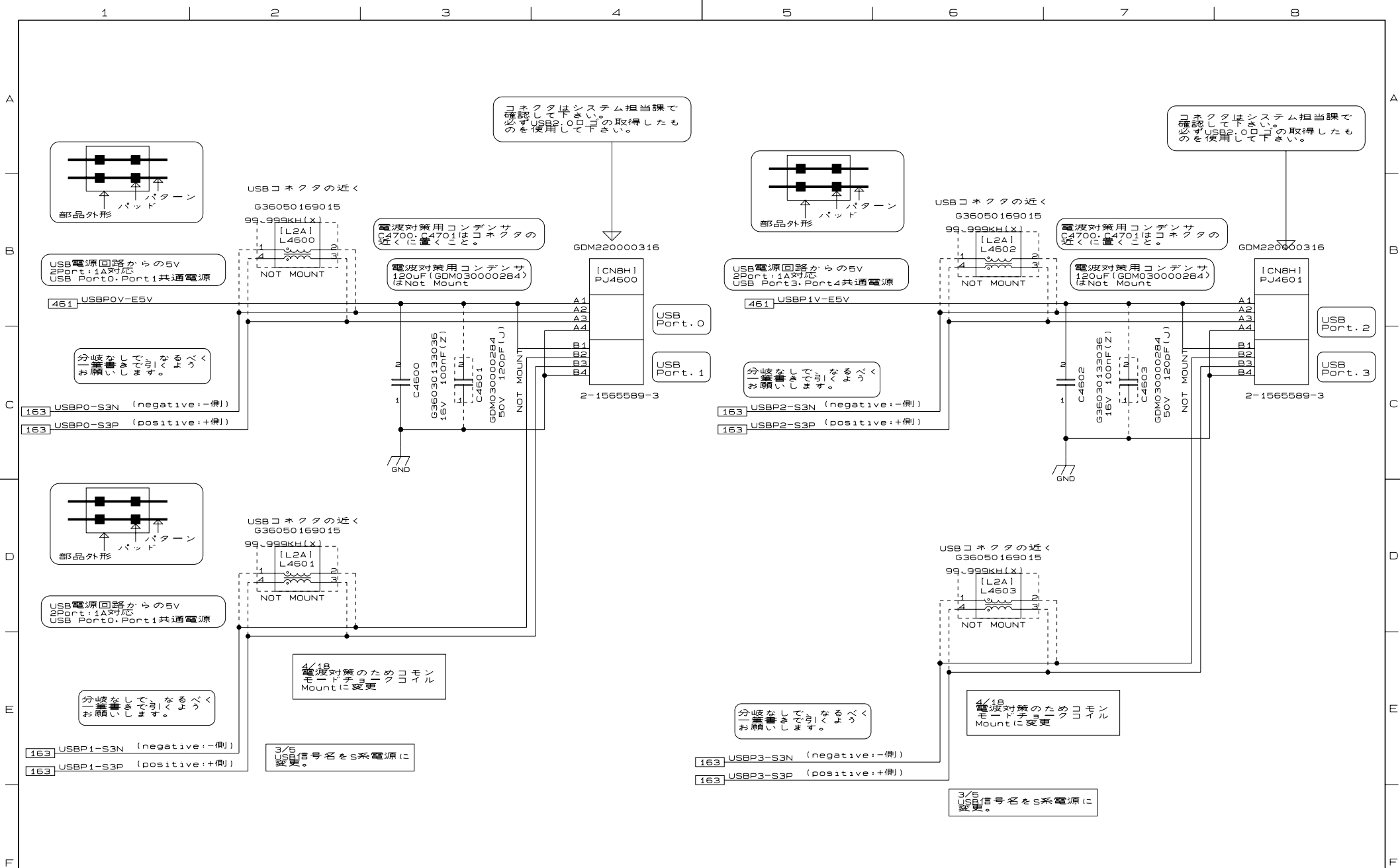
WakeUp未サポートの為、電源回路/リセット回路削除

DESIGNED BY	2003/7/3	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
K. Uchida		FLM1M2	1394 POWER/Etc	424	73	00	360048117

下表に、TSB43AB22の各電源ピンごとに配置するパスコンの容量と数量について記述する。

PIN NAME	PIN NO.	パスコンの容量と数量			
		1nF	100nF	10uF	22uF
VDDP	20		× 1		
	35		× 1		
	48		× 1		
	62		× 1		
	78		× 1		
DVDD	15		× 1		
	27		× 1		
	39		× 1		
	51		× 1	× 1	× 1
	59		× 1		(注1)
	72		× 1		
	88		× 1		
AVDD	1		× 1		
	2		× 1		
	107		× 1	× 1	
	108		× 1		
	120		× 1		
PLLVD	7	× 1	× 1		× 1

(注1) WakeUpサポート用電源回路実装の場合
電源回路出力部(SI9933の近く)に配置



DESIGNED BY 2003/07/02

I. Hamano

TITLE

FLM1M2

FUNCTION

USB I/F

SH. NO.

460

PAGE NO.

75

REV. MARK

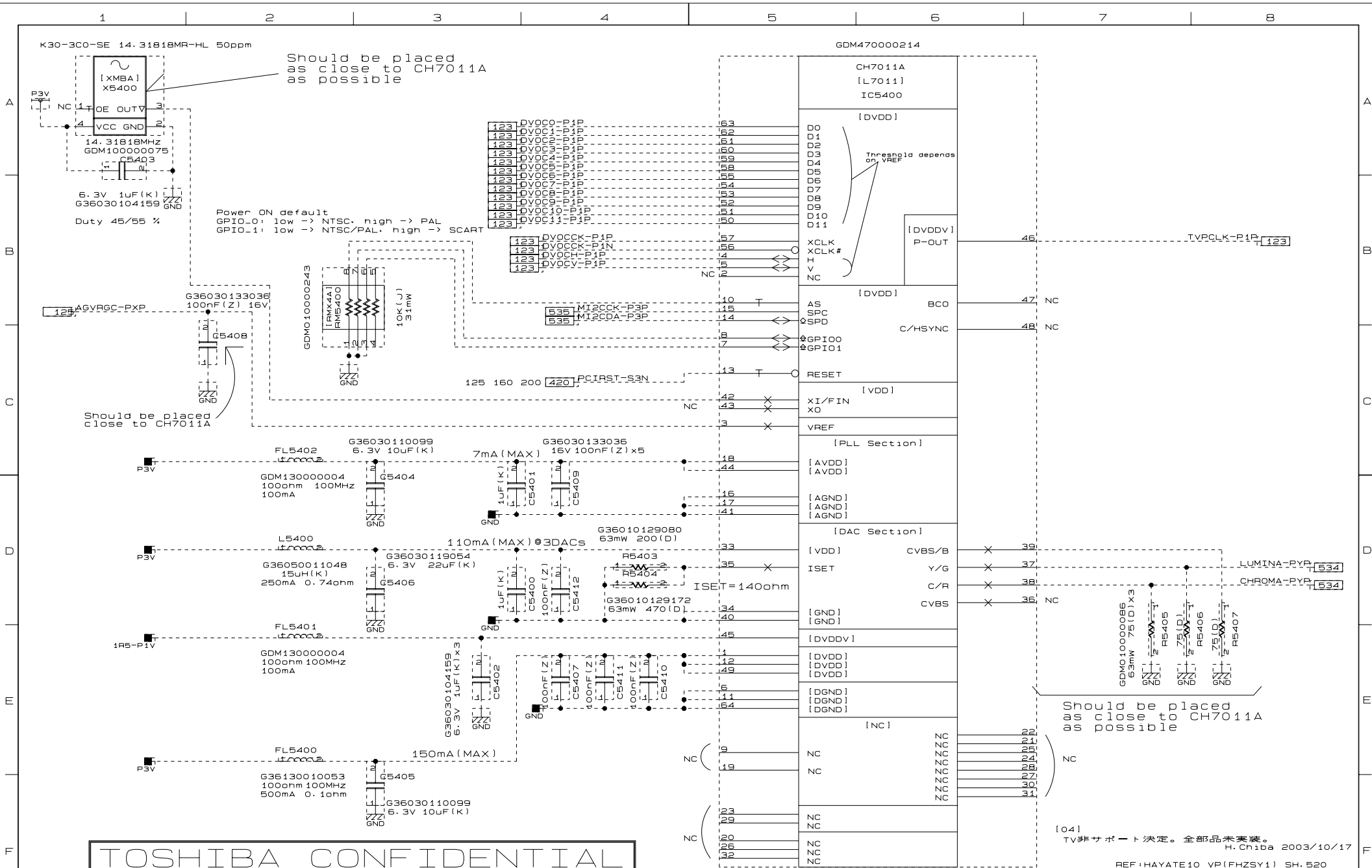
00

DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



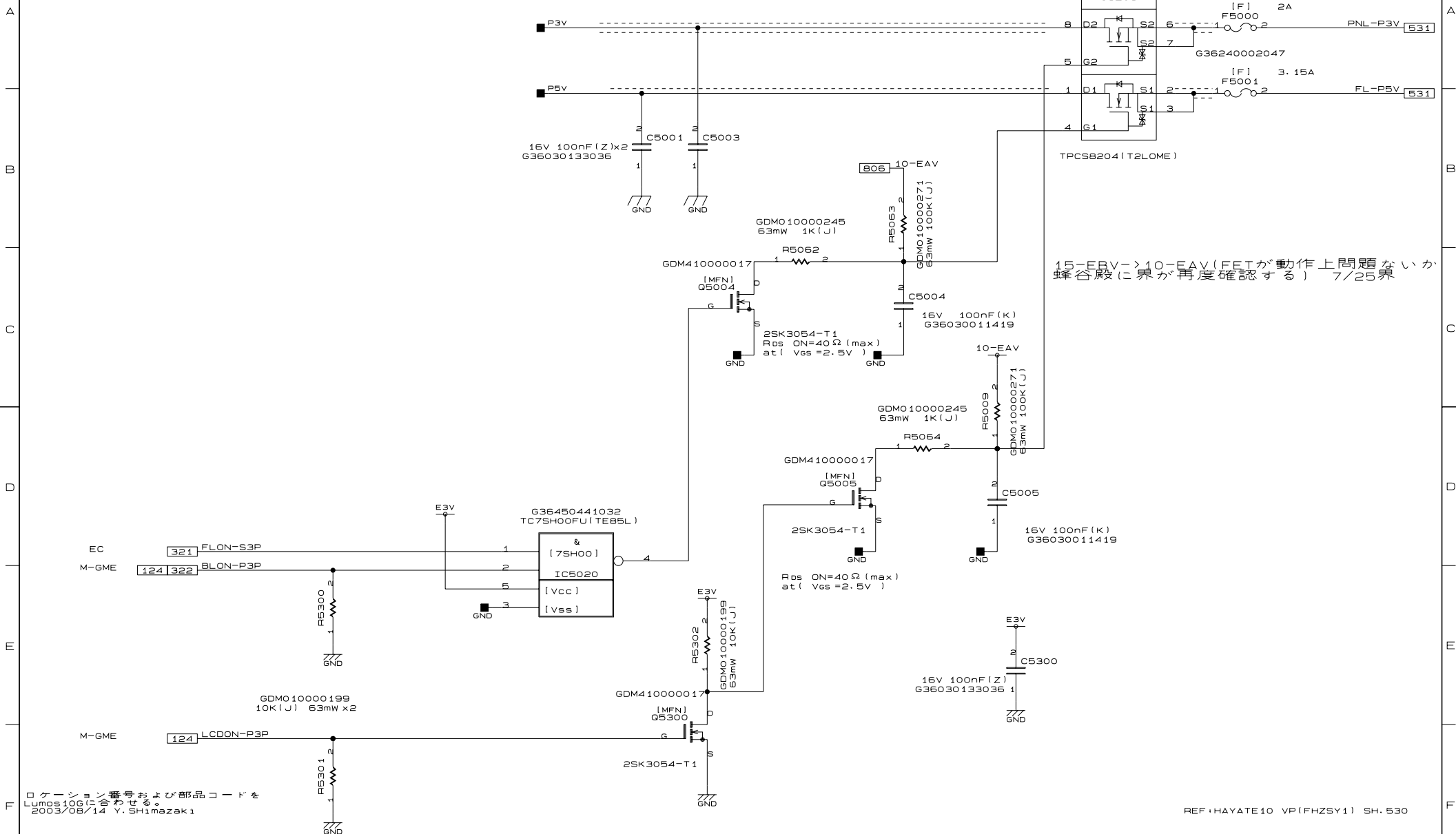
TOSHIBA CONFIDENTIAL

DESIGNED BY	2003/10/17	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
H. Chiba		FLM1M2	TV Encoder	520	77	04	360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION

TOSHIBA CONFIDENTIAL



DESIGNED BY	2003/8/13	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
H. Chiba		FLM1M2	LCD PS I/F	530	78	00	360048117

2003. 11. 17 14:10

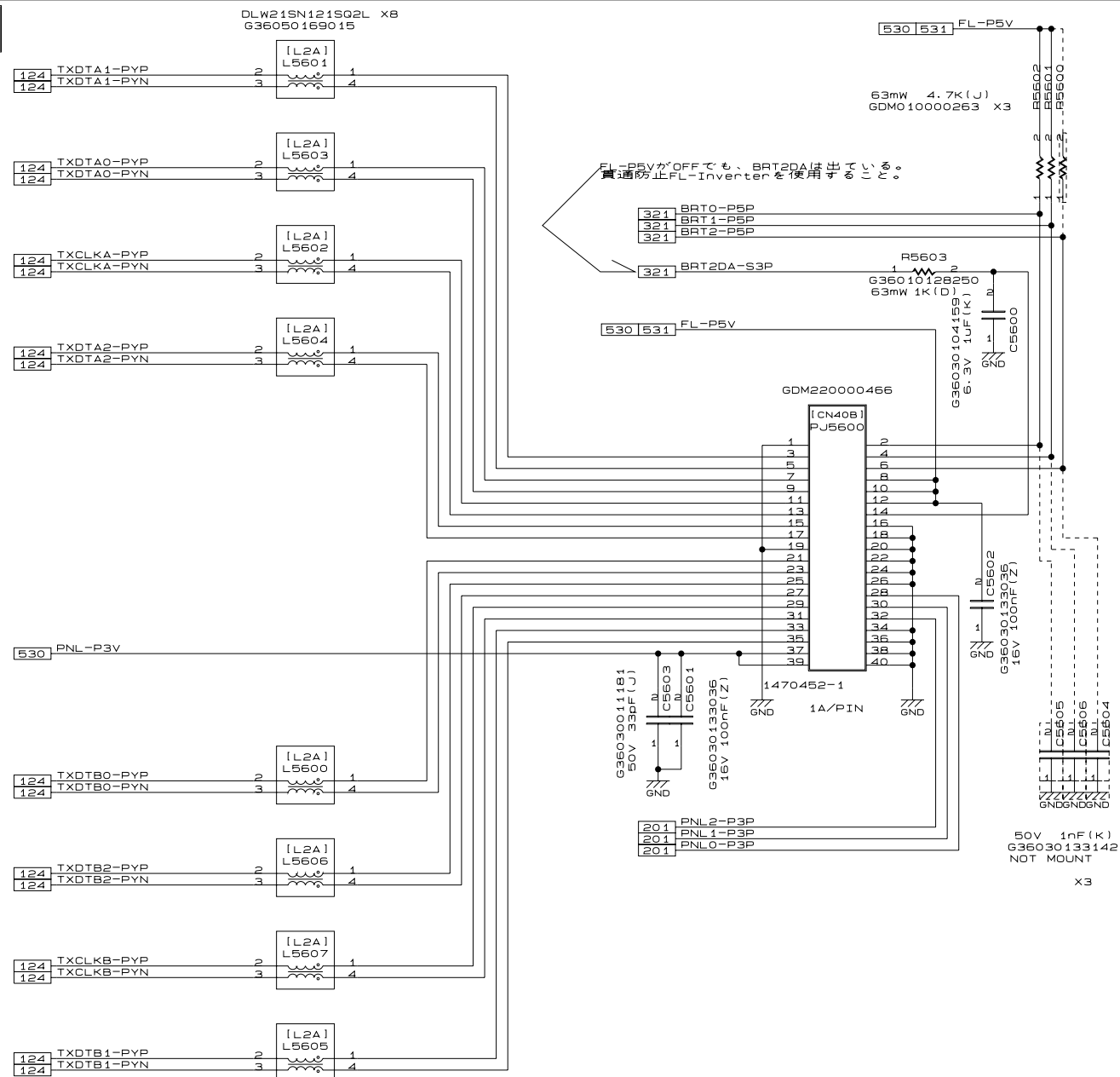
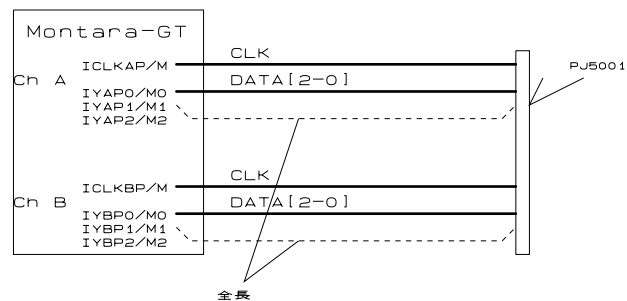
TOSHIBA CORPORATION

TOSHIBA CONFIDENTIAL

PNL2	PNL1	PNL0	LCD TYPE
0	0	0	Reserved
0	0	1	Reserved
0	1	0	Reserved
0	1	1	Reserved
1	0	0	1024x768 (14.1" TFT)
1	0	1	1024x768 (15.0" TFT)
1	1	0	1400x1050 (15.0" TFT)
1	1	1	1024x768 (13.3" TFT)

- 1) 配線の全長は150mm以内。
- 2) ChA、及び、ChBのDATA信号は、ChAのCLK信号(POS)に対して+/- 0.5mm以内に配線。
- 3) 以下の差信号ペア同士は+/-0.5mm以内に配線。
- | | |
|-------------------------|-------------------------|
| ChAのCLK : ICLKAP&ICLKAM | ChBのCLK : ICLKBP&ICLKBM |
| ChAのDATA: IYAP0&IYAM0 | ChAのDATA: IYBP0&IYBM0 |
| IYAP1&IYAM1 | IYBP1&IYBM1 |
| IYAP2&IYAM2 | IYBP2&IYBM2 |
- 4) 線長調整はMontara-GMのPackage Lengthを含んだ値である。
詳細はIntel RDDPを参照。

その他、詳細はIntel RDDPを参照。



REF: Hangzhou10 VP (FHZSY1) SH. 531

DESIGNED BY 2003/8/8

H. Chiba

TITLE

FLM1M2

FUNCTION

LCD CONN.

SH. NO.

531

PAGE NO.

79

REV. MARK

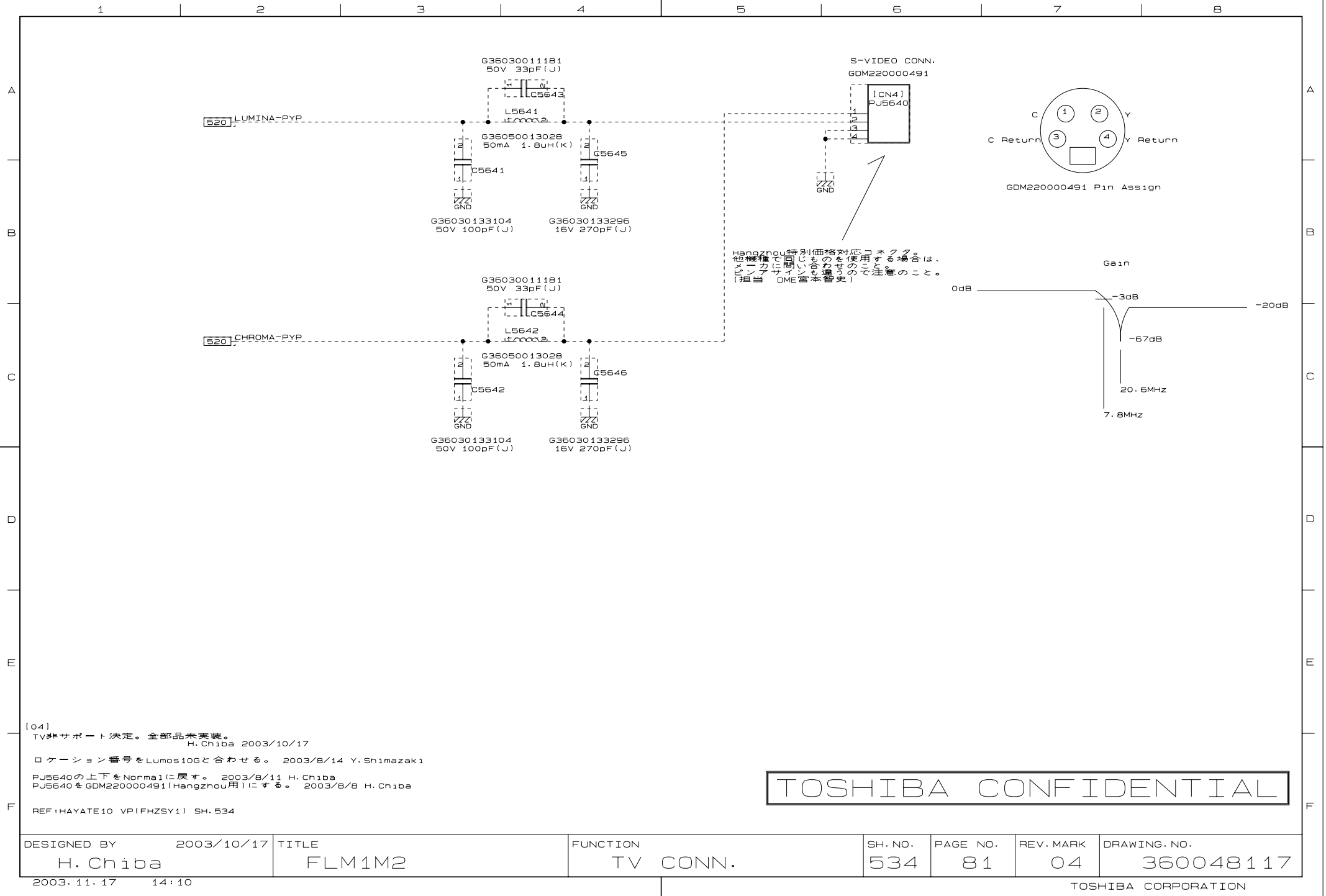
00

DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



[041]

TV非サポート決定。全部品未実装。
H.Chiba 2003/10/17

ロケーション番号をLumos10Gと合わせる。 2003/8/14 Y.Shimazaki

PJ5640の上下をNormalに戻す。 2003/8/11 H.Chiba
PJ5640をGDM220000491(Hangzhou用)にする。 2003/8/8 H.Chiba

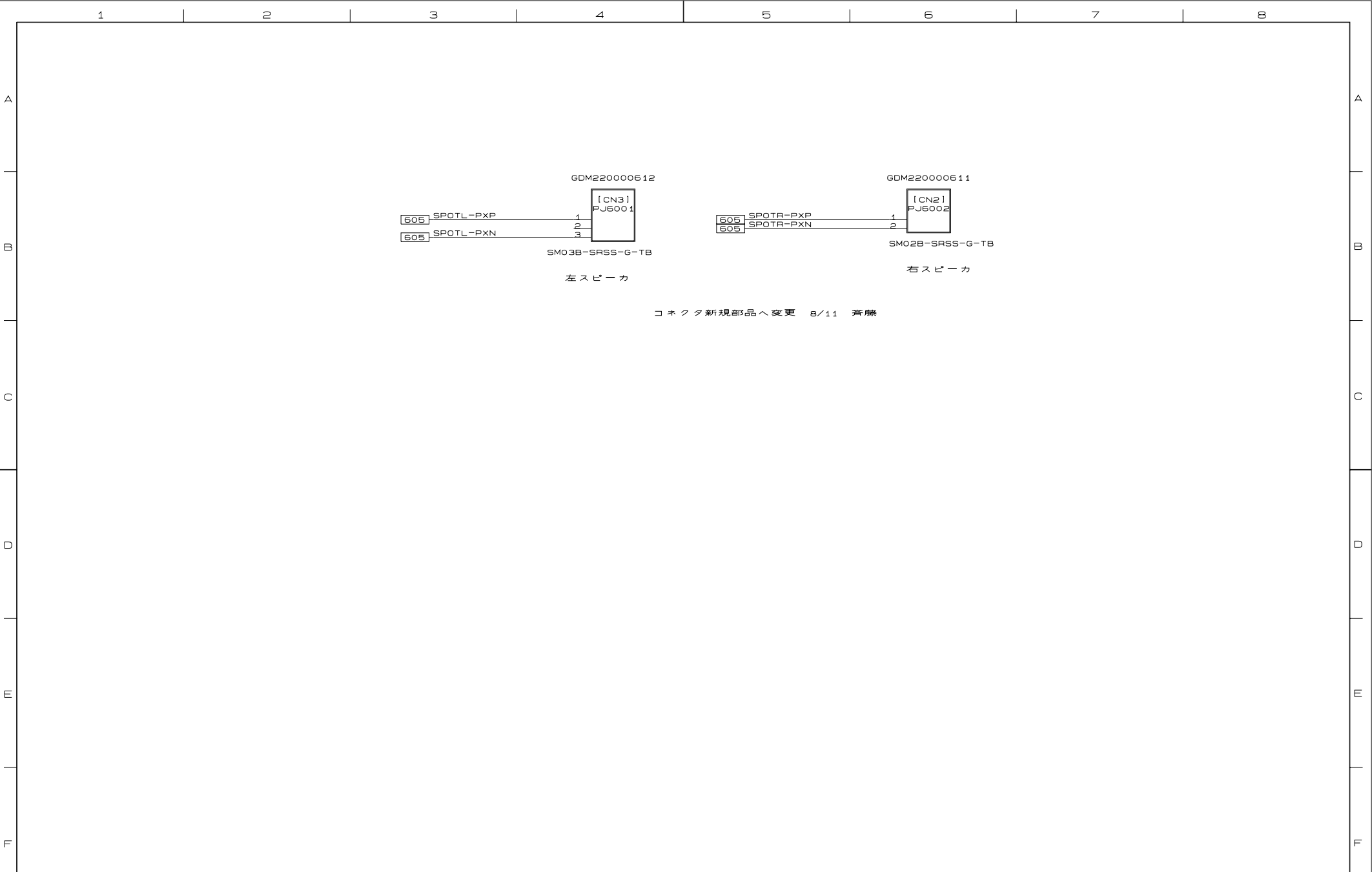
REF:HAYATE10 VP(FHZSY1) SH.534

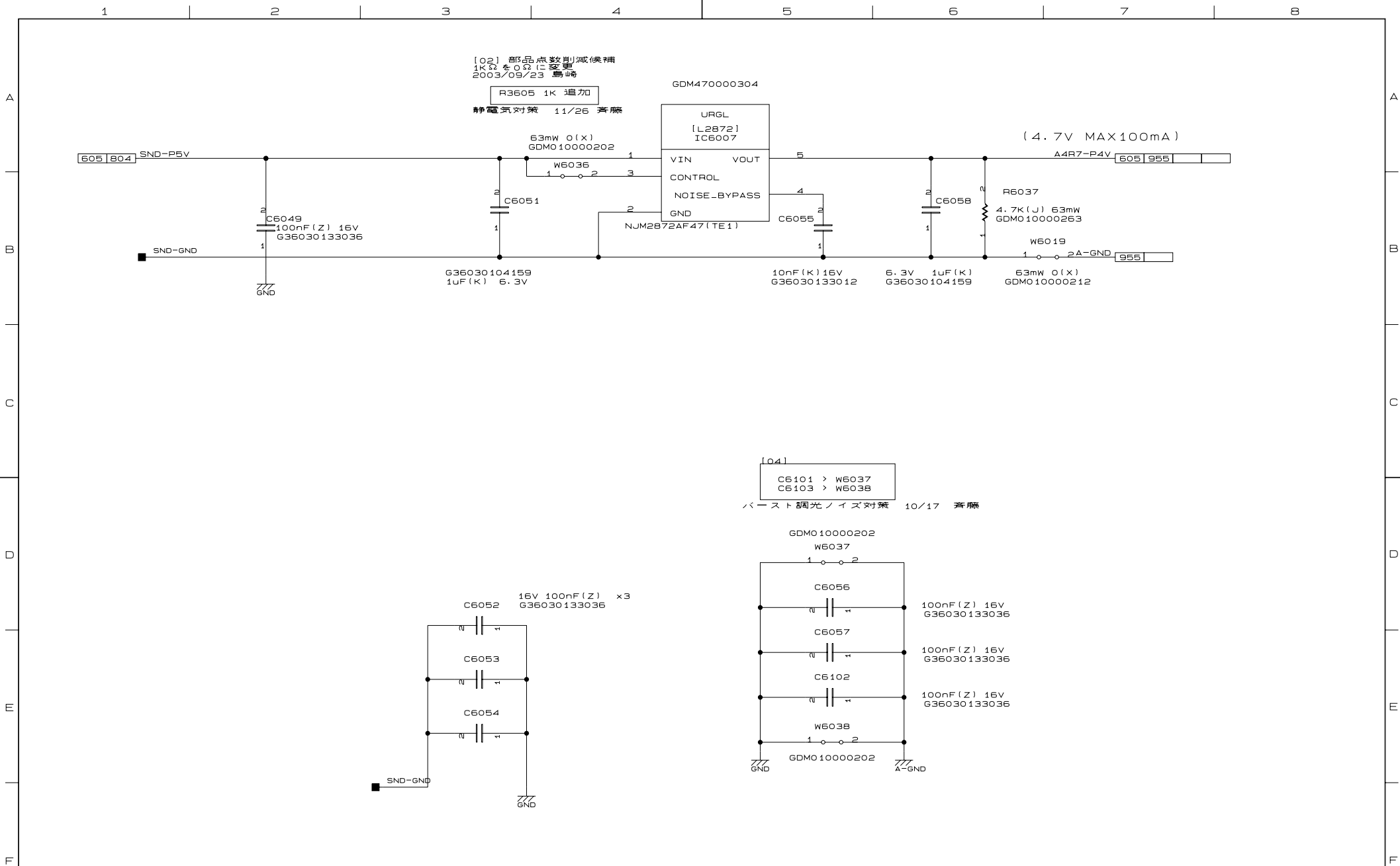
TOSHIBA CONFIDENTIAL

DESIGNED BY	2003/10/17	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
H. Chiba		FLM1M2	TV CONN.	534	81	04	360048117

2003.11.17 14:10

TOSHIBA CORPORATION





DESIGNED BY 2003/10/17

K. Saito

TITLE

FLM1M2

FUNCTION

ANALOG POWER

SH. NO.

608

PAGE NO.

86

REV. MARK

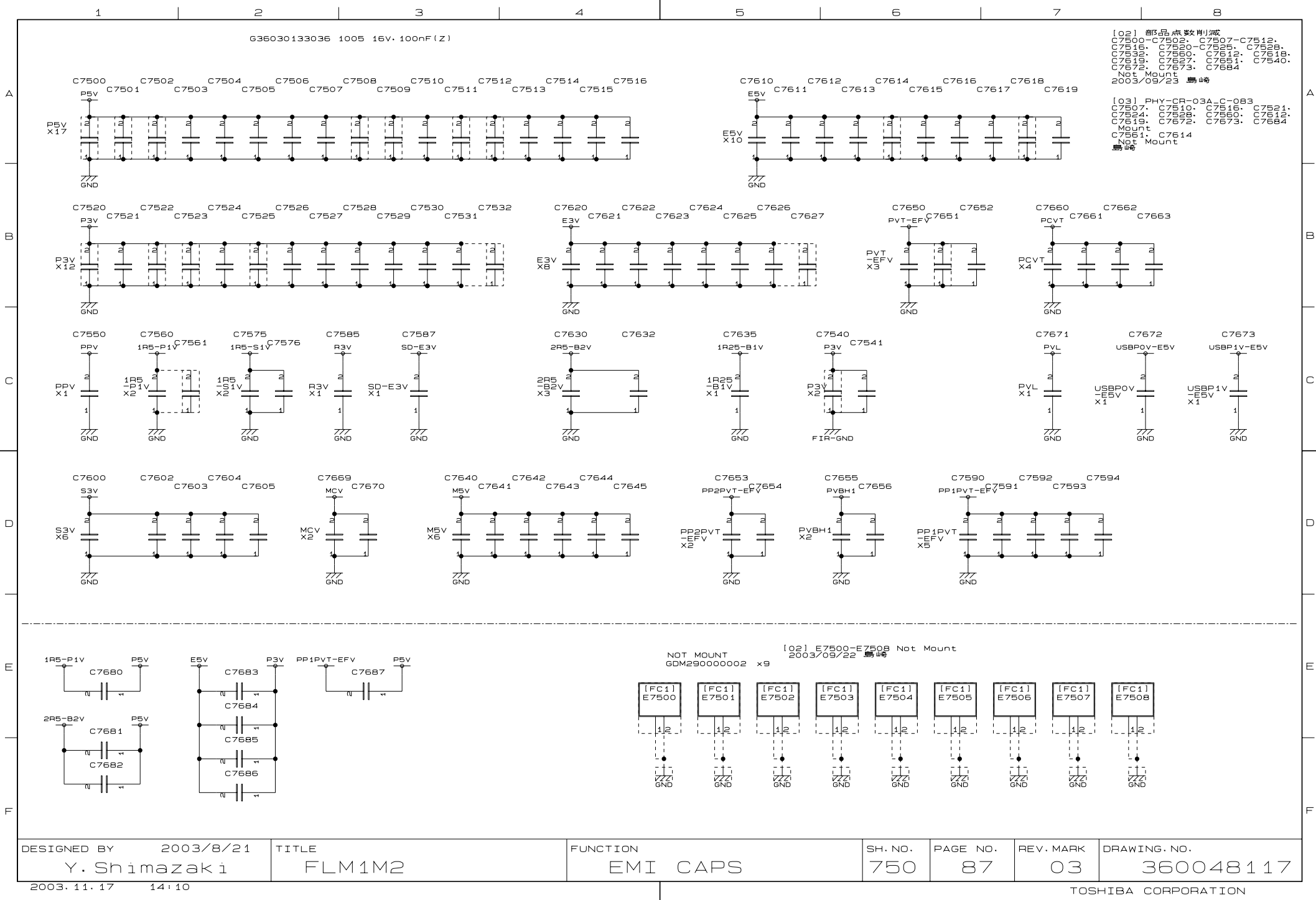
04

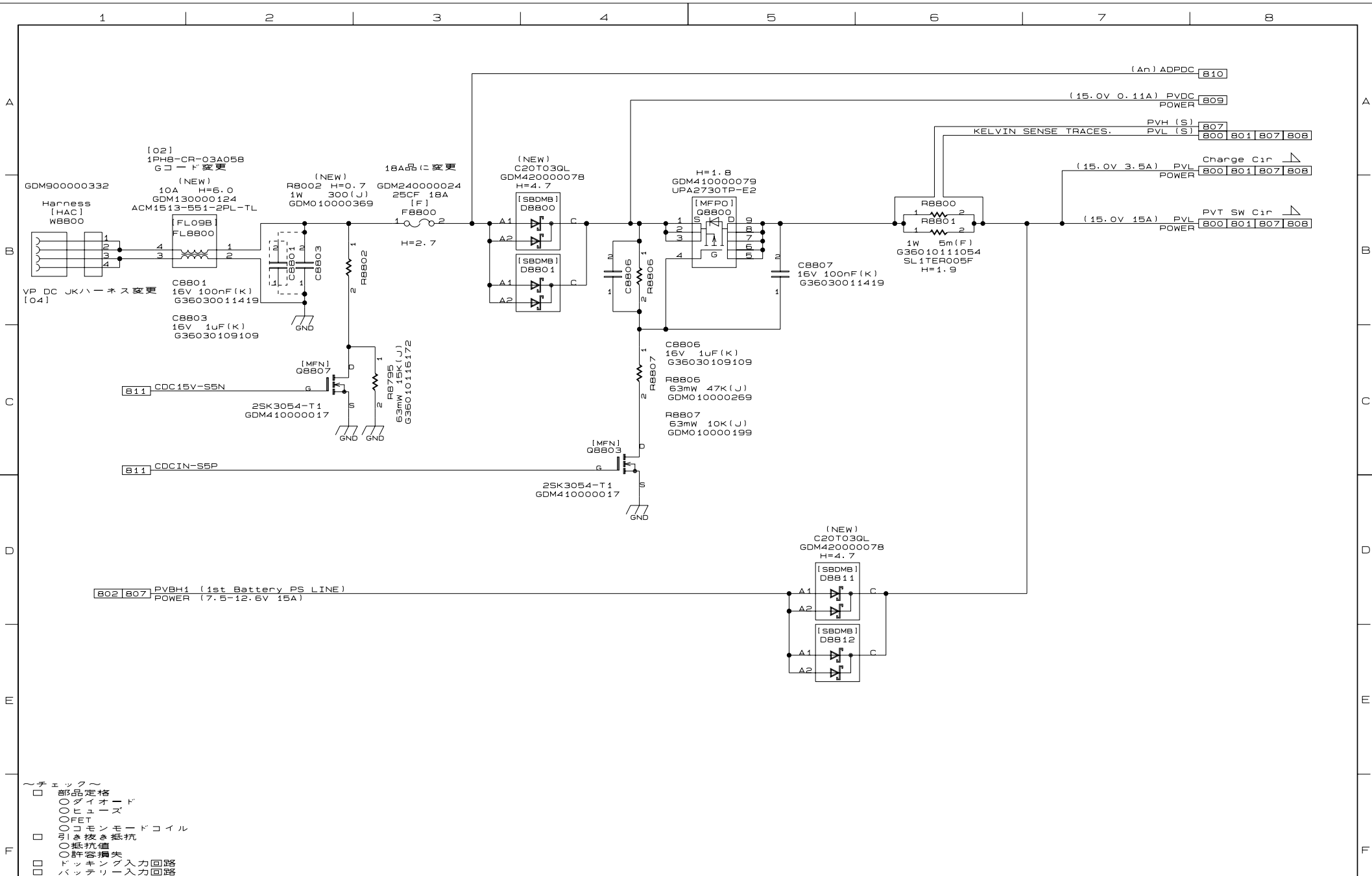
DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION





DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] DC-IN

SH. NO.

800

PAGE NO.

88

REV. MARK

04

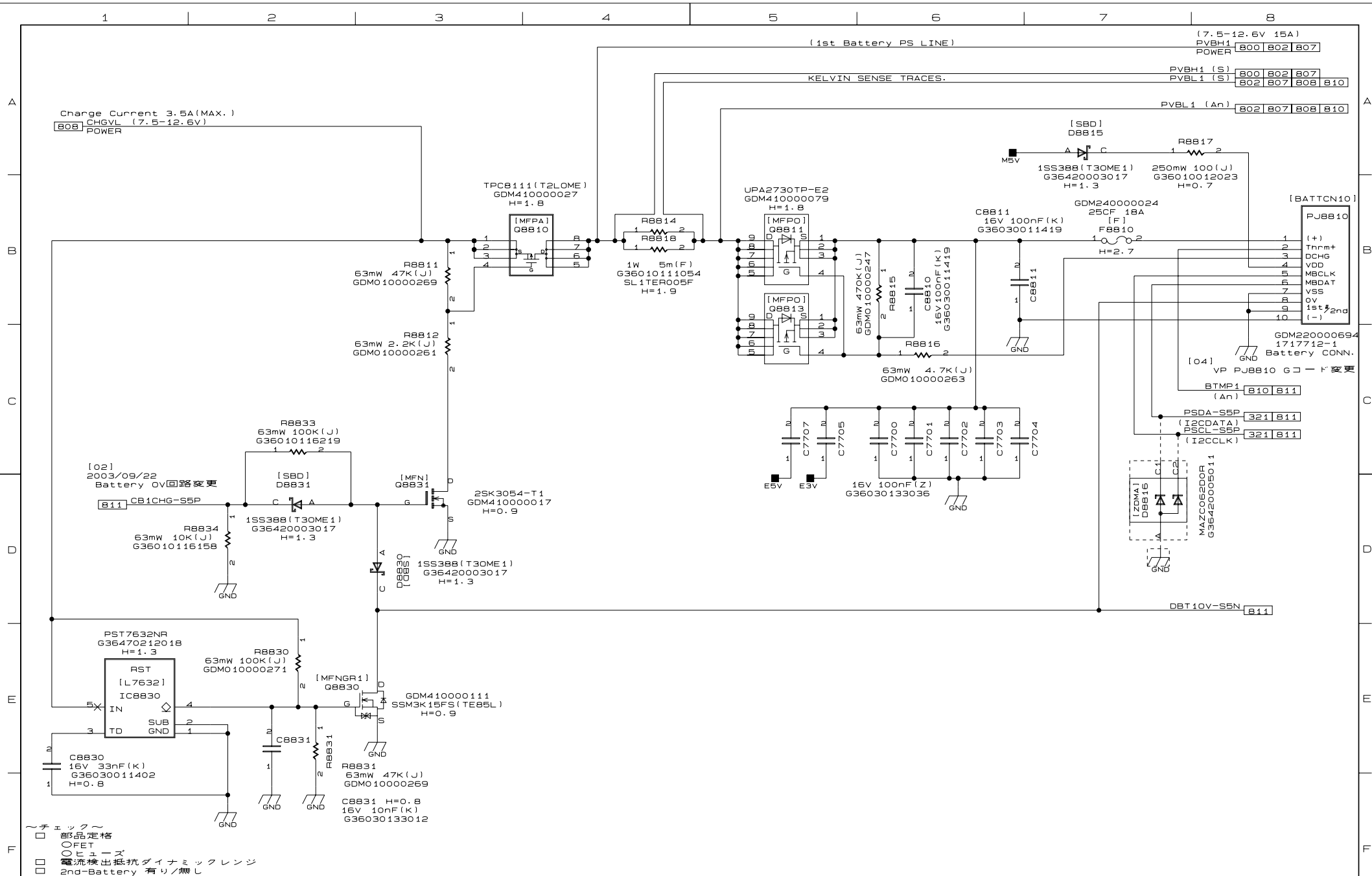
DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION





DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] 1st Battery

SH. NO.

802

PAGE NO.

90

REV. MARK

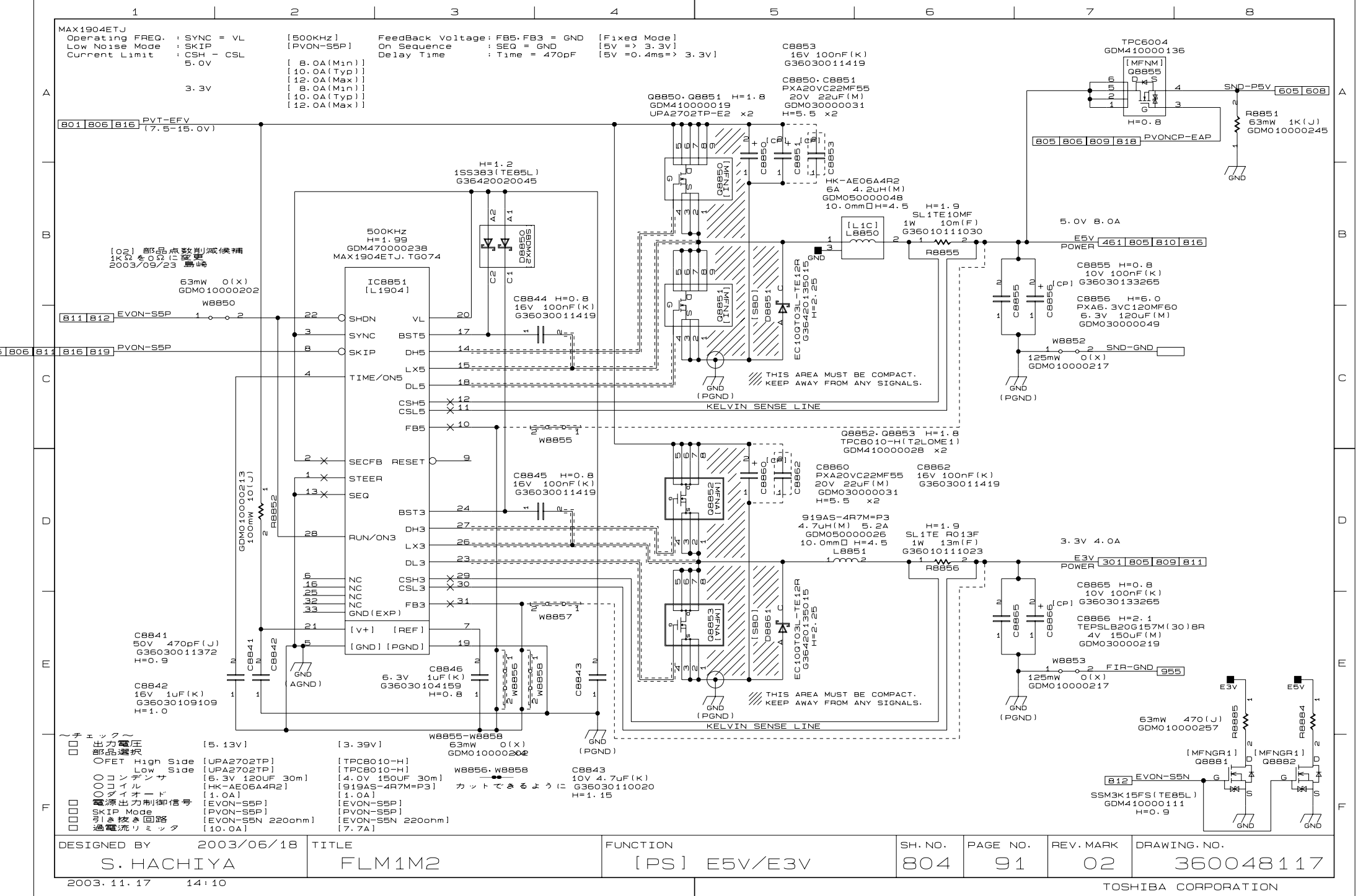
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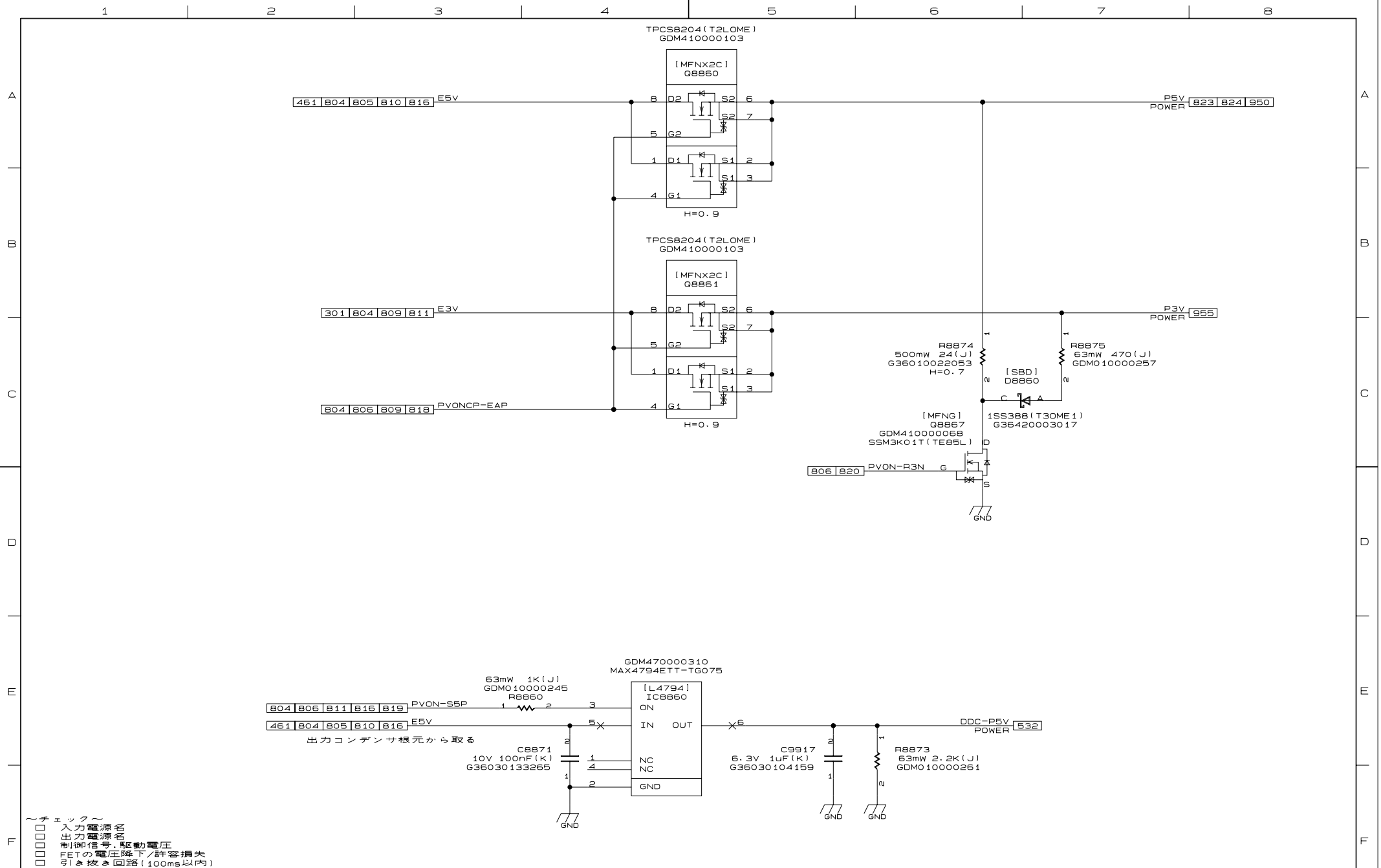
DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION





DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] PW SW

SH. NO.

805

PAGE NO.

92

REV. MARK

00

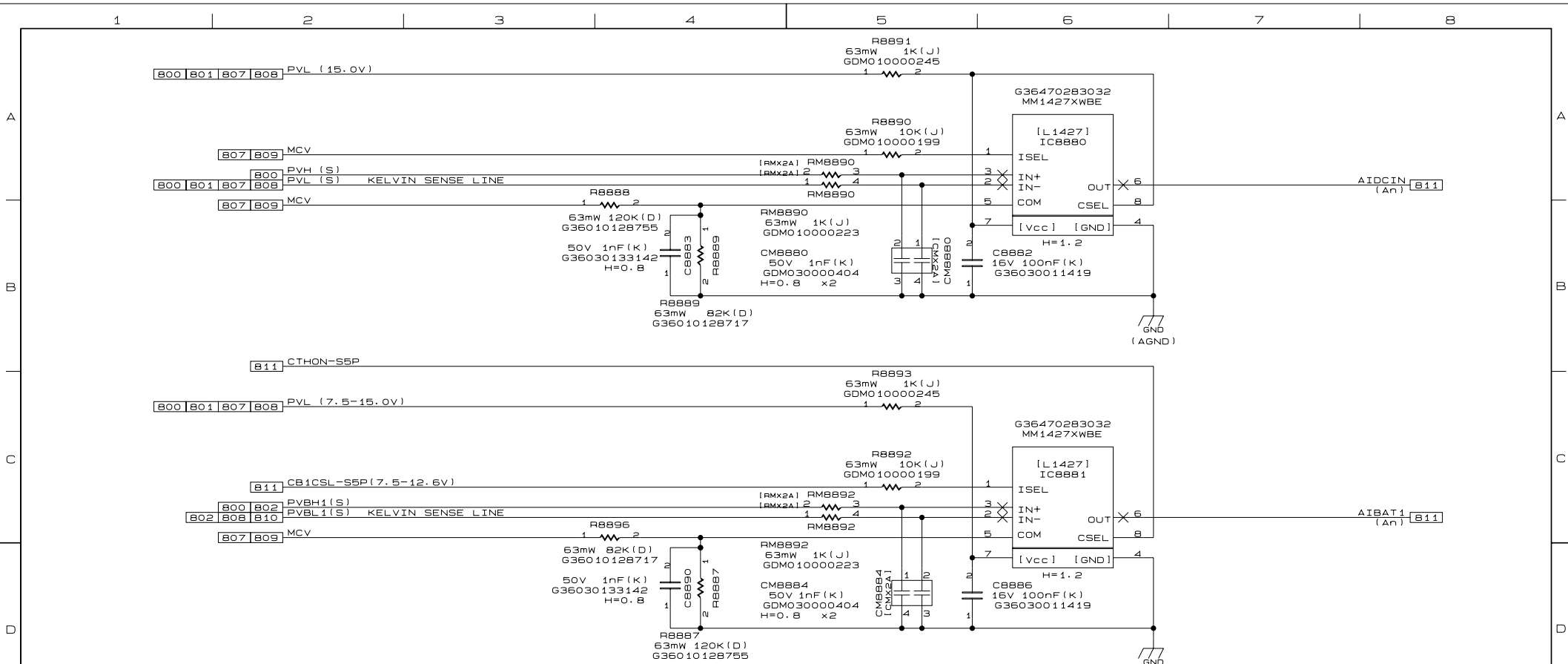
DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION

DESIGNED BY S. HACHIYA	2003/06/18	TITLE FLM1M2	FUNCTION [PS] E10V	SH. NO. 806	PAGE NO. 93	REV. MARK 00	DRAWING. NO. 360048117
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～チェック～

- ☐ 2nd-Battery 有り/無し
- ☐ 電流検出範囲
- ☐ 電流検出抵抗値
- ☐ 検出ICのGain
- ☐ PSC入力範囲

DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] CURRENT AMP

SH. NO.

807

PAGE NO.

94

REV. MARK

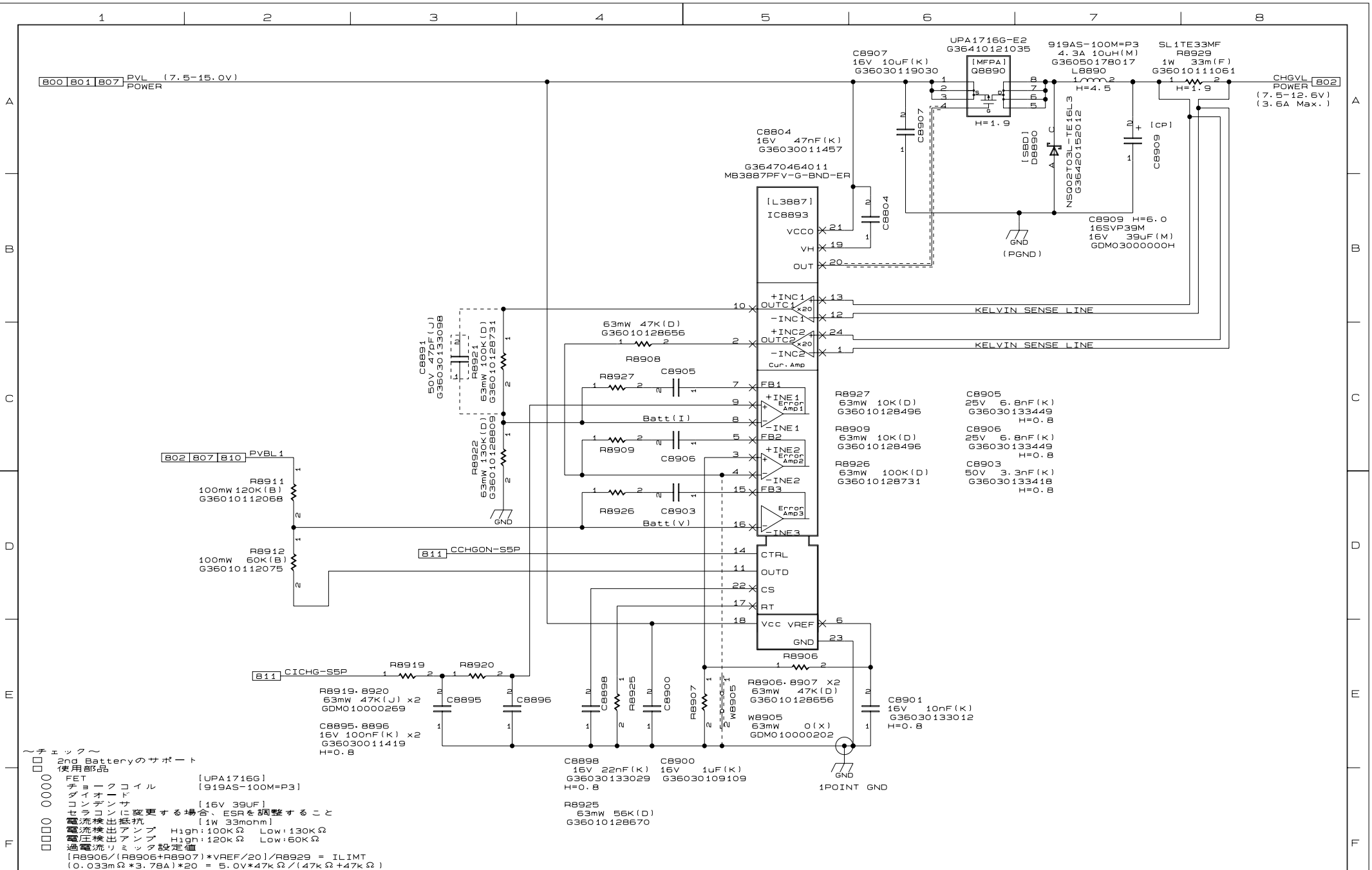
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DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] CHARGE

SH. NO.

808

PAGE NO.

95

REV. MARK

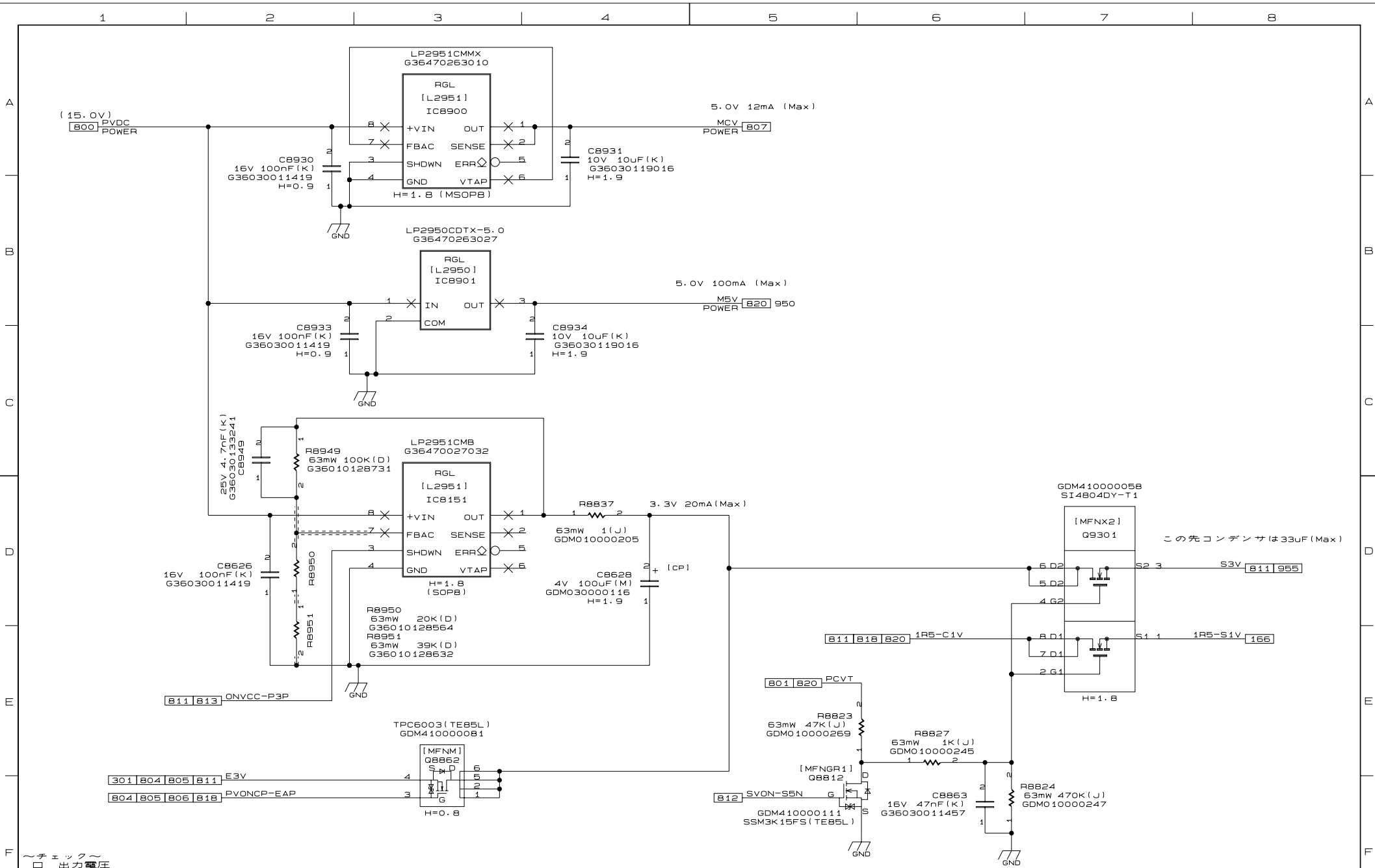
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DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] MCV/S*v

SH. NO.

809

PAGE NO.

96

REV. MARK

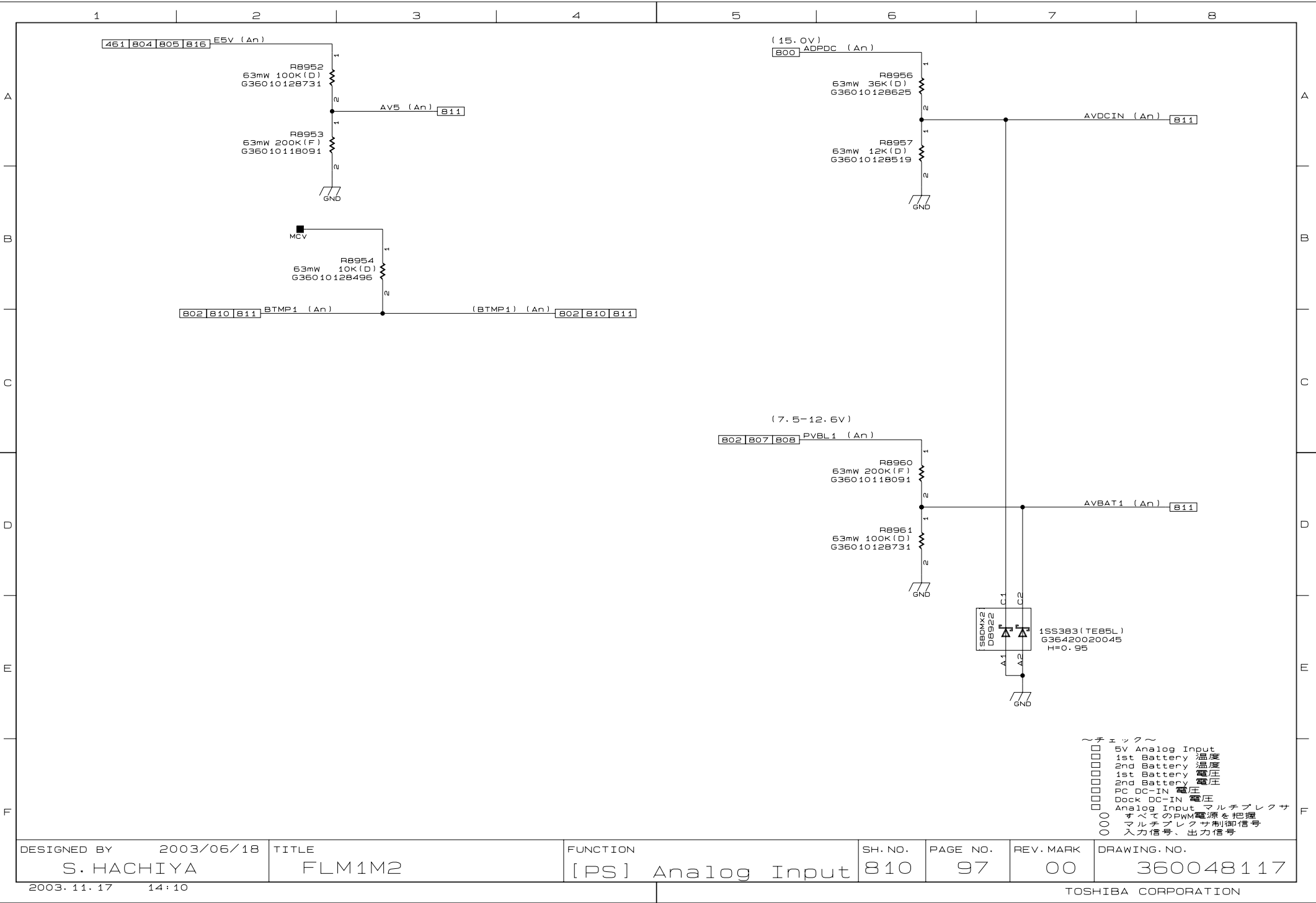
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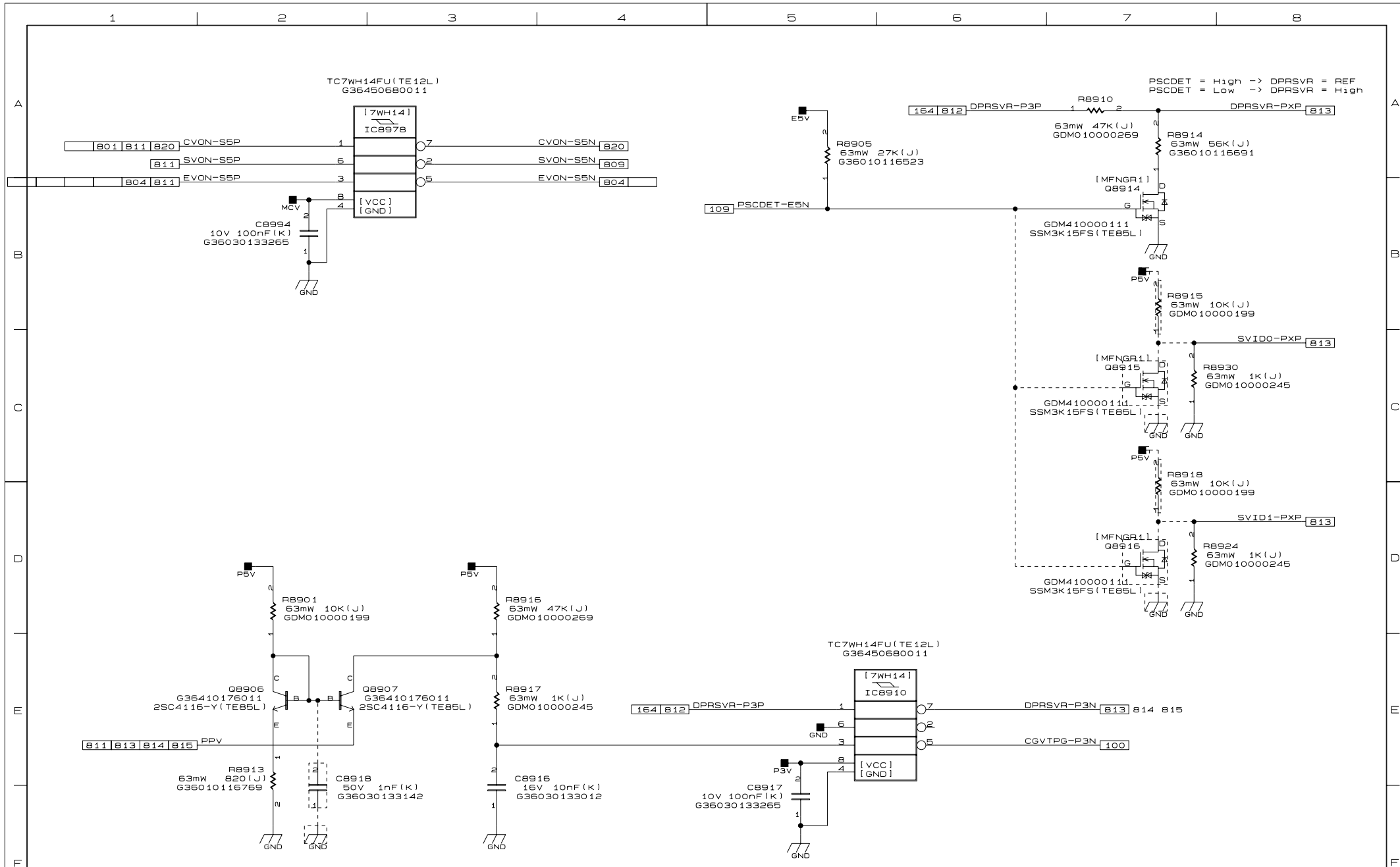
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360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION





DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] PSC(2)

SH. NO.

812

PAGE NO.

99

REV. MARK

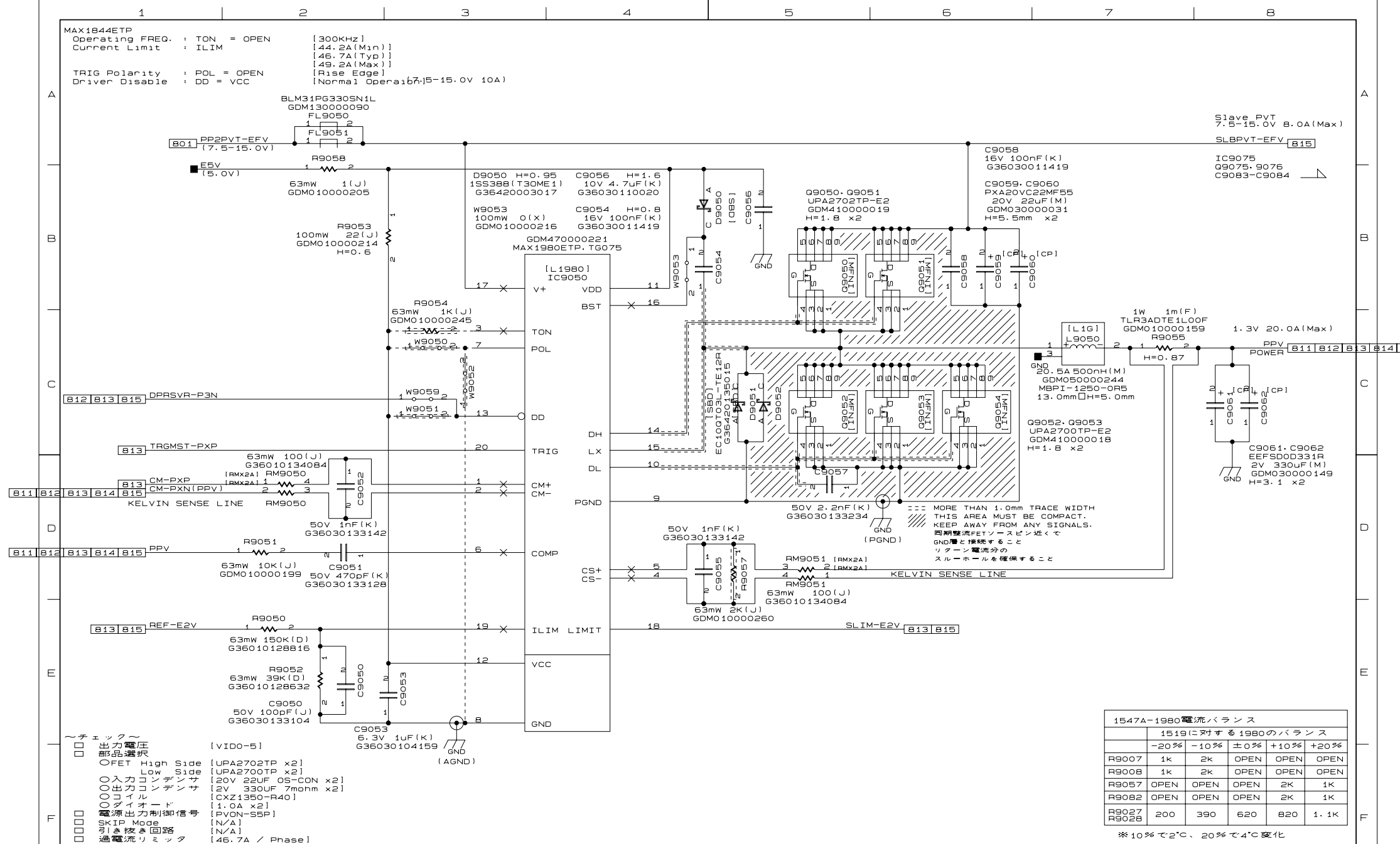
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DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] CPUVCC(2)

SH. NO.

814

PAGE NO.

101

REV. MARK

00

DRAWING NO.

360048117

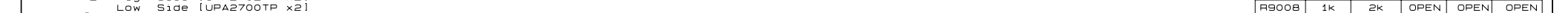
2003. 11. 17

14:10

TOSHIBA CORPORATION

[illegible]

	100mW	22(J)	GDM470000321			B
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- | | | | | | | | | |
|---|---------------------|-------|-----|-----|-----|-----|------|----|
| □ | 電源出力制御信号 [PVON-S5P] | 89027 | 200 | 390 | 620 | 820 | 1.1K | FE |
|---|---------------------|-------|-----|-----|-----|-----|------|----|

※ 10%で2°C、20%で4°C変化

DRAWING NO.

360048117

A



C

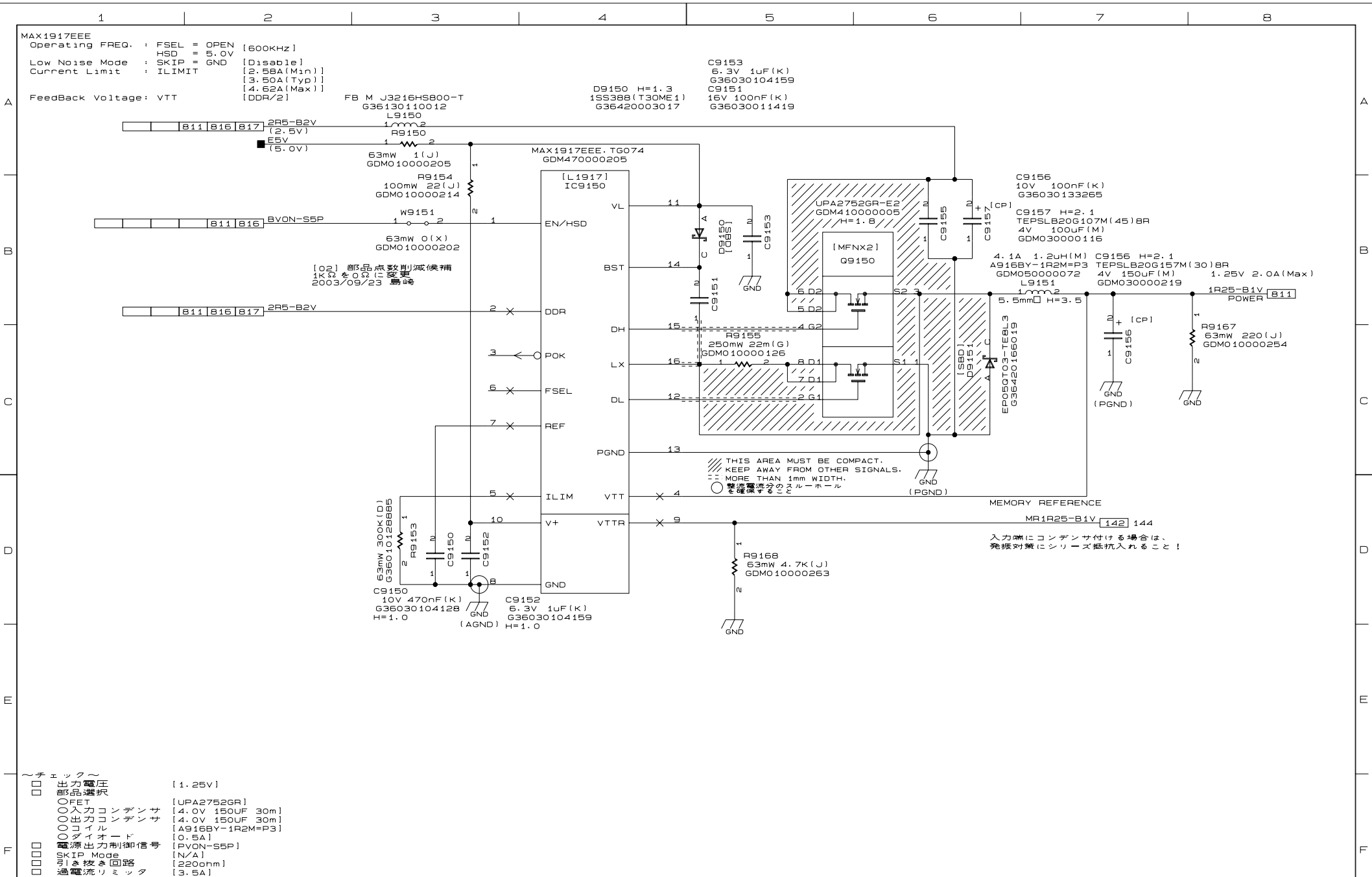
D

E

F

F

DRAWING. NO.
360048117



DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] 1R25-B1V

SH. NO.

817

PAGE NO.

104

REV. MARK

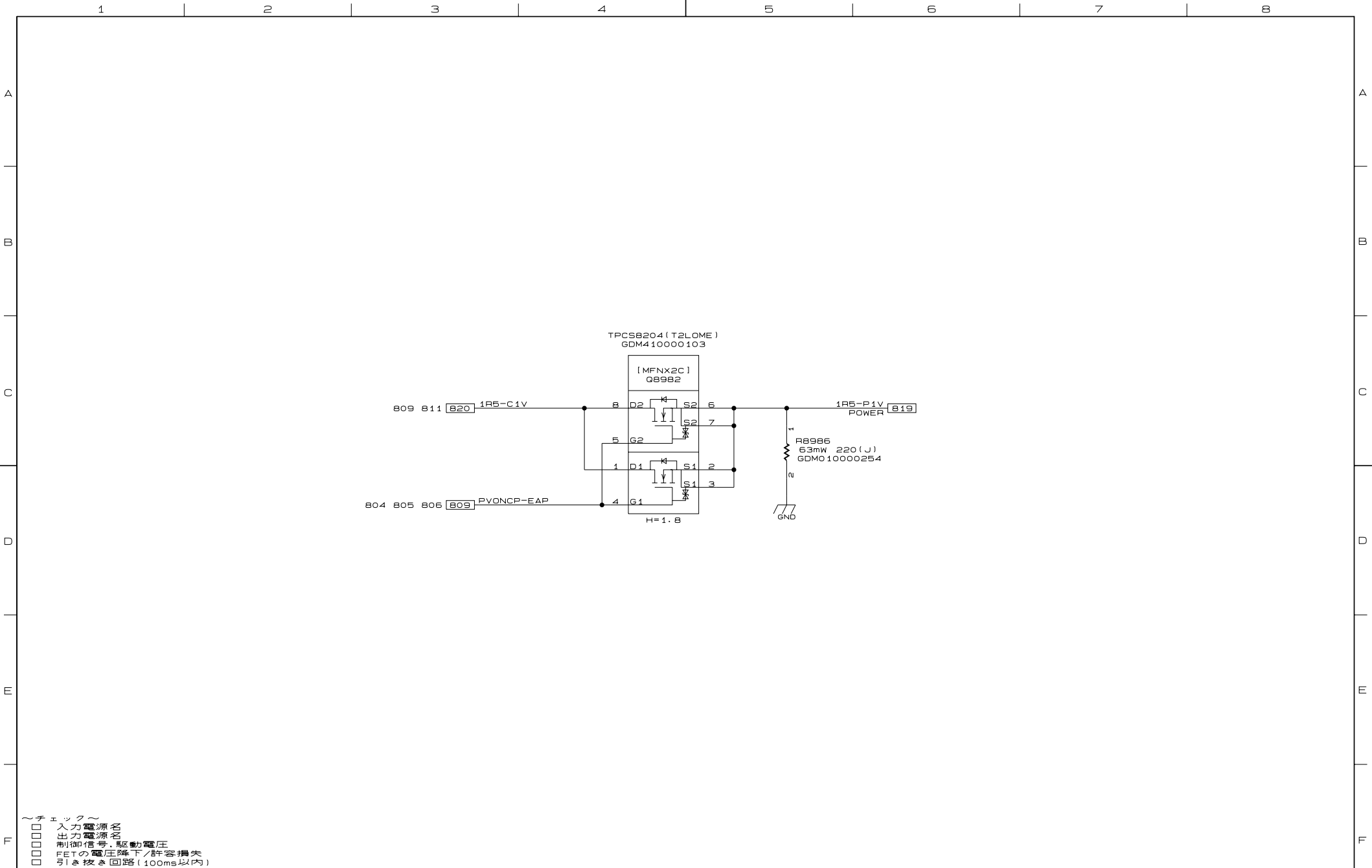
02

DRAWING. NO.

360048117

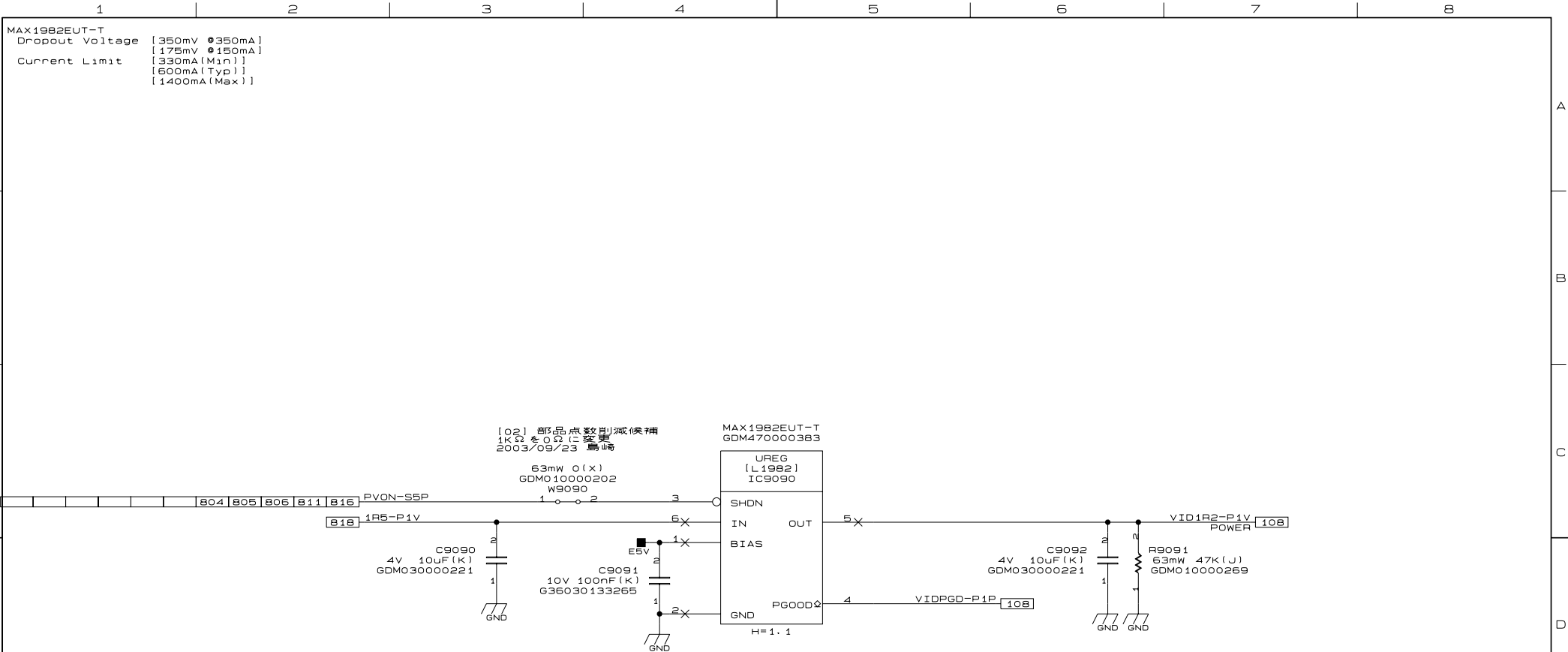
2003. 11. 17 14:10

TOSHIBA CORPORATION



- ～チェック～
- ☐ 入力電源名
 - ☐ 出力電源名
 - ☐ 制御信号、駆動電圧
 - ☐ FETの電圧降下/許容損失
 - ☐ 引き抜き回路 (100ms以内)

DESIGNED BY	2003/06/18	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
S. HACHIYA		FLM1M2	[PS] PW-SW	818	105	00	360048117



～チェック～

- ☐ 出力電圧 [1.2V]
☐ 部品選択
☐ 入力コンデンサ [4.0V 10uF MLCC]
☐ 出力コンデンサ [4.0V 10uF MLCC]
☐ 電源出力制御信号 [PVON-S5P]
☐ 引き抜き回路 [47Kohm]
☐ 過電流リミッタ [600mA]

DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] VID1R2-P1V

SH. NO.

819

PAGE NO.

106

REV. MARK

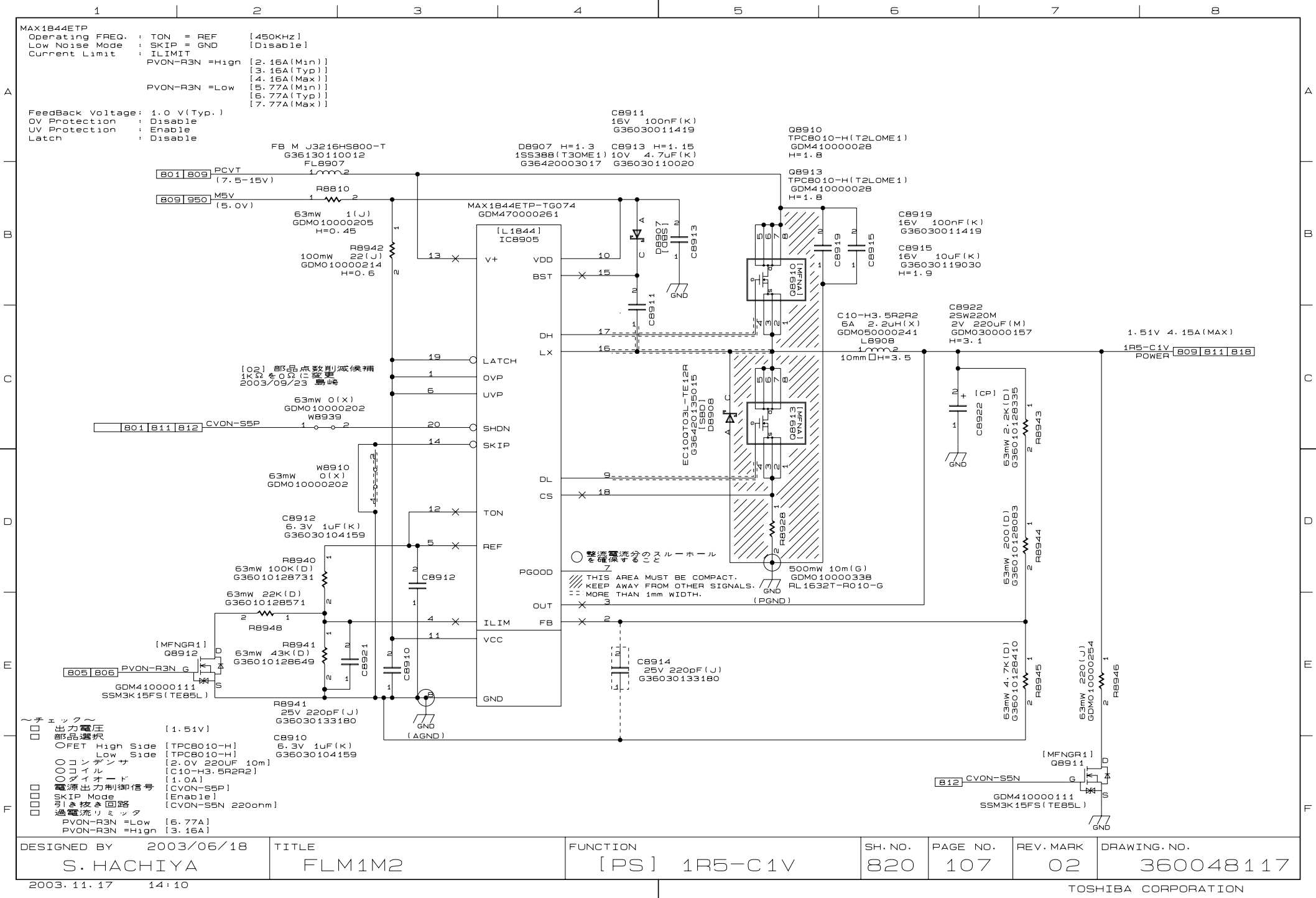
02

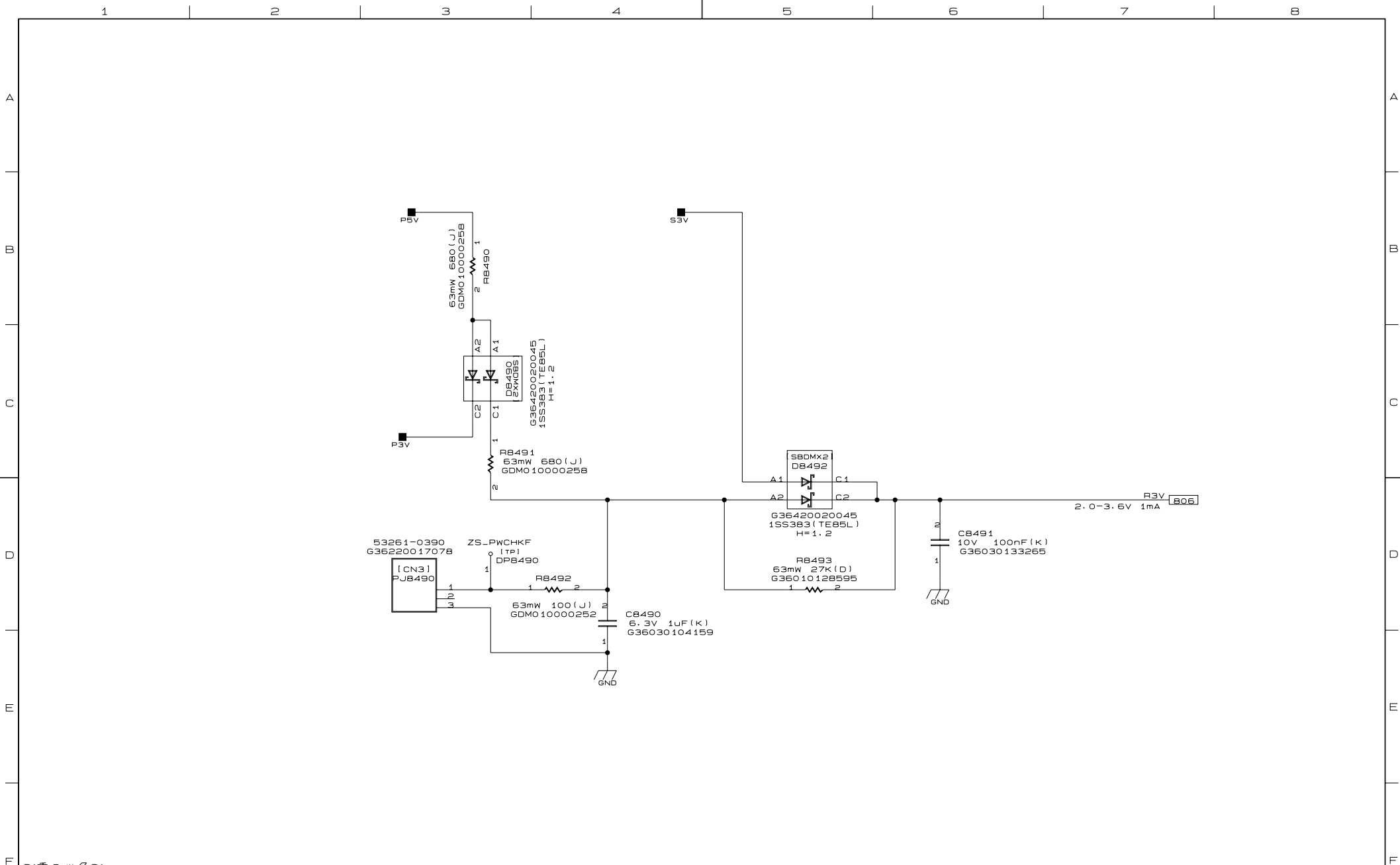
DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION





DESIGNED BY 2003/06/18

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] RTCVCC

SH. NO.

822

PAGE NO.

108

REV. MARK

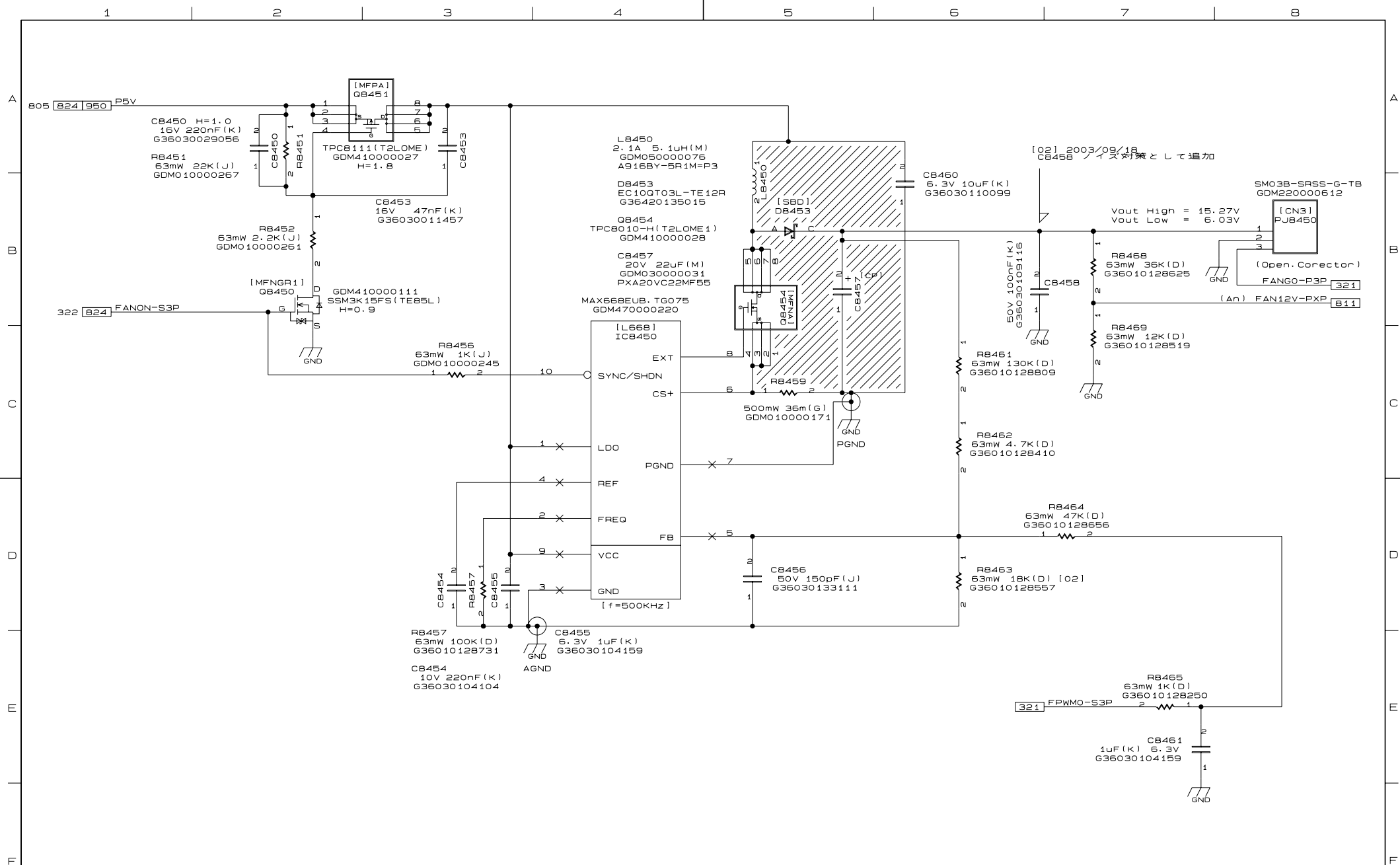
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DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



DESIGNED BY 2001/11/20

S. HACHIYA

TITLE

FLM1M2

FUNCTION

[PS] FANVCC

SH. NO.

823

PAGE NO.

109

REV. MARK

02

DRAWING. NO.

360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION

～チップ～

☐ FAN電圧 [5.0V]

☐ コネクタ

☐ PWM信号電圧

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

TITLE
FLM1M2

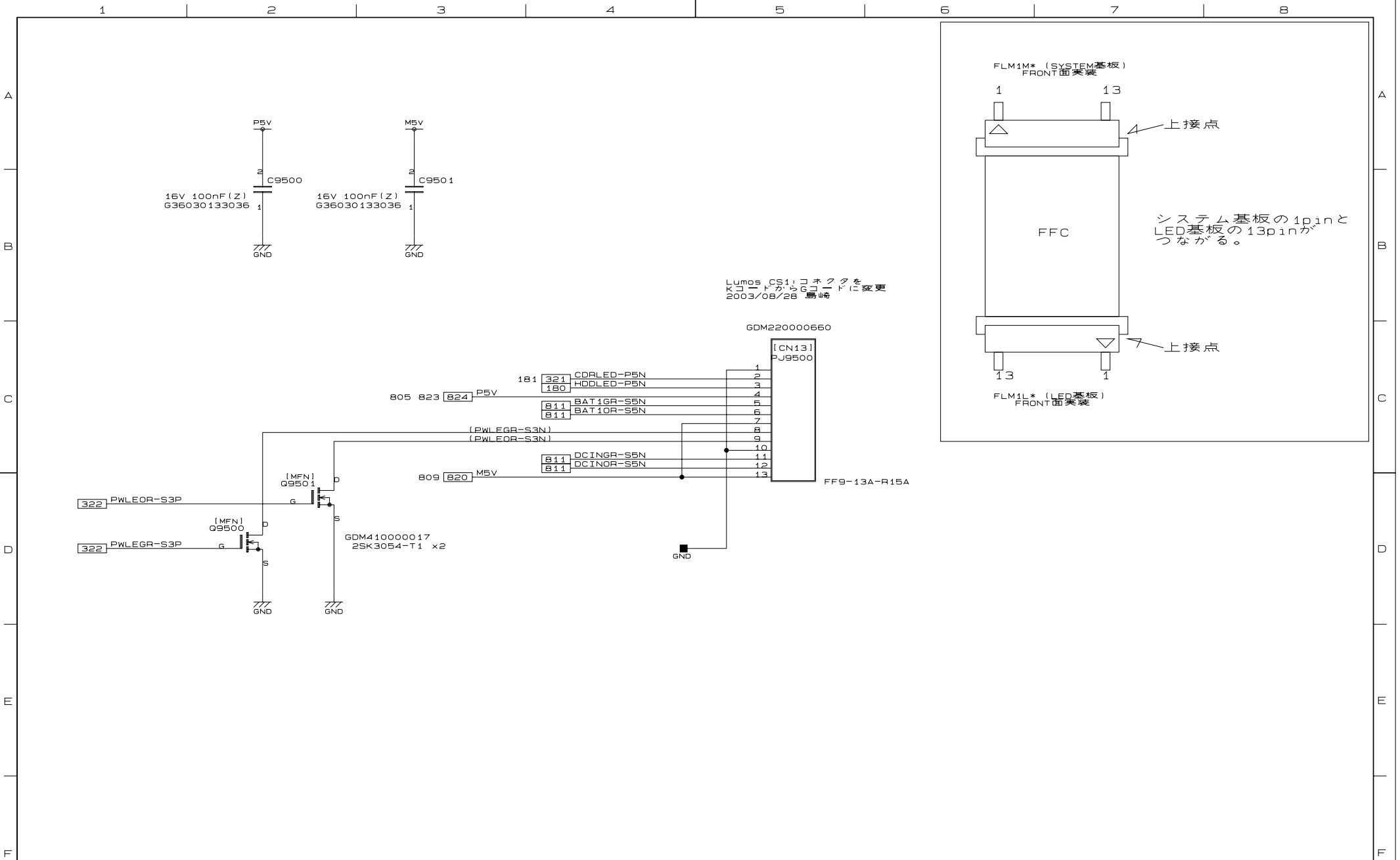
FUNCTION	[PS] FANVCC (1)
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SH. NO.	824
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PAGE NO.	110
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REV. MARK
06

DRAWING. NO.	360048117
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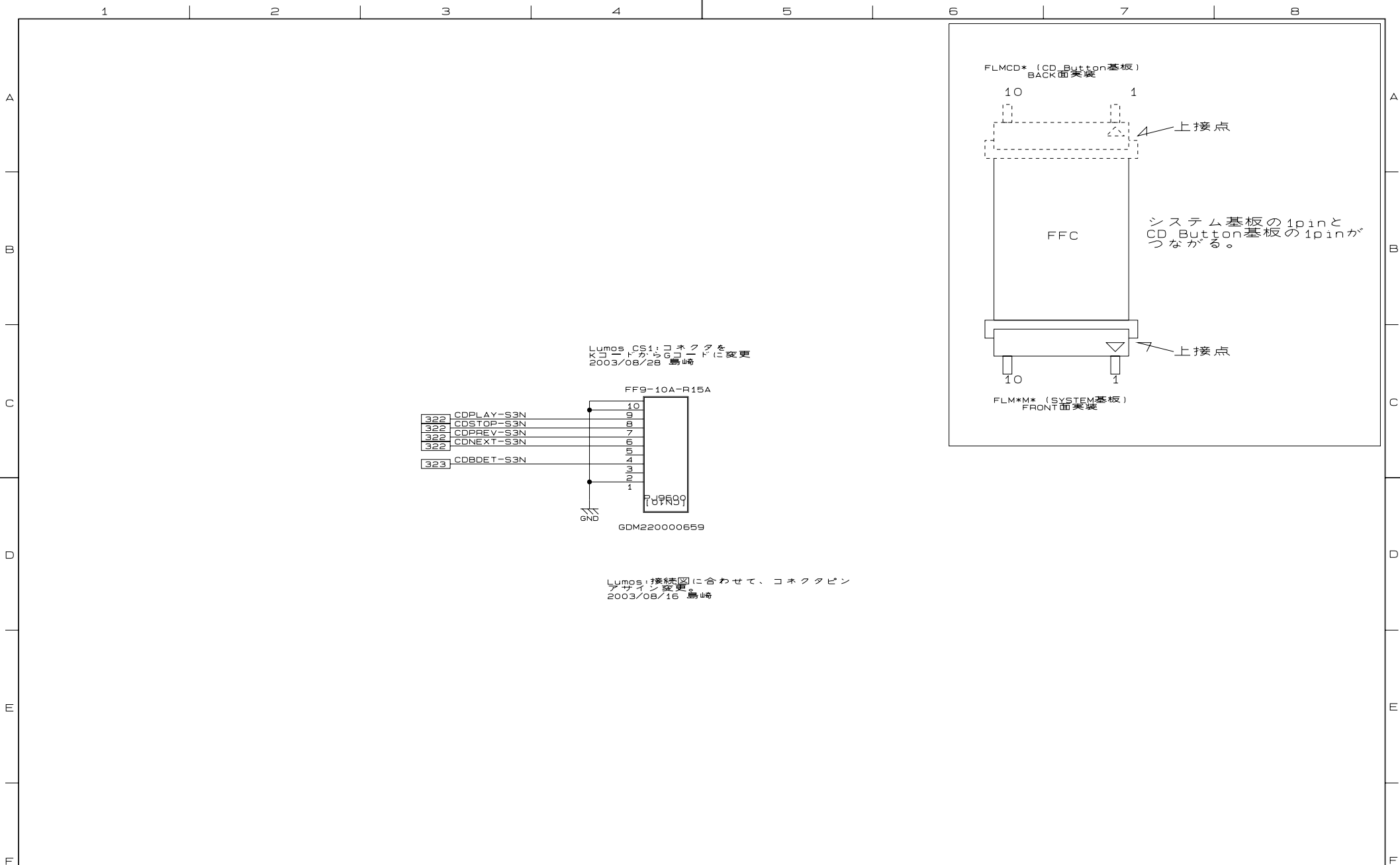


REF:Original

DESIGNED BY 2003/07/24
Y. ShimazakiTITLE
FLM1M2FUNCTION
FLM1L* I/FSH. NO.
950PAGE NO.
111REV. MARK
00DRAWING. NO.
360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION



REF:Original

DESIGNED BY	2003/07/28	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
Y. Shimazaki		FLM1M2	FLMCD* I/F	960	113	00	360048117

2003. 11. 17 14:10

TOSHIBA CORPORATION