



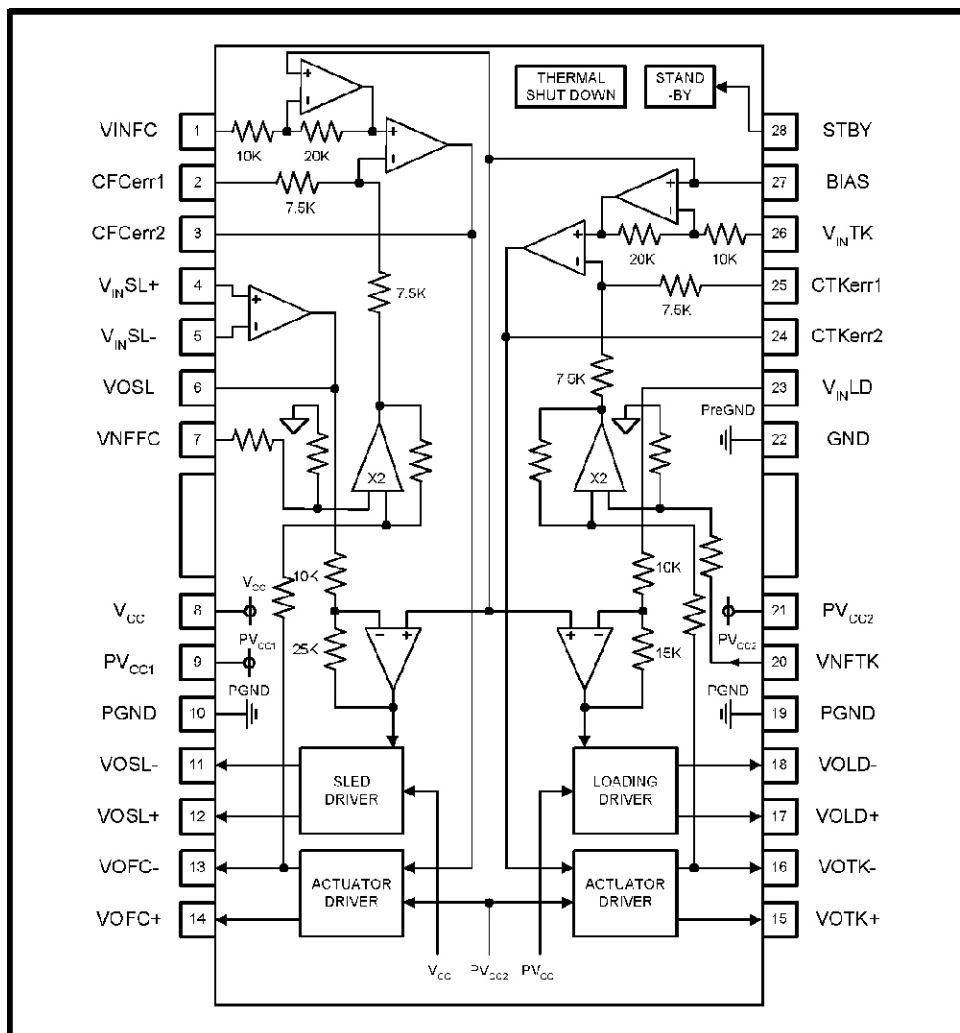
Manual de servicio

MODELO: DG-K23
REPRODUCTOR DE
DISCO VERSATIL DIGITAL

CIRCUIT OPERATIONAL DESCRIPTION

1) Motor Drive IC: AT5654

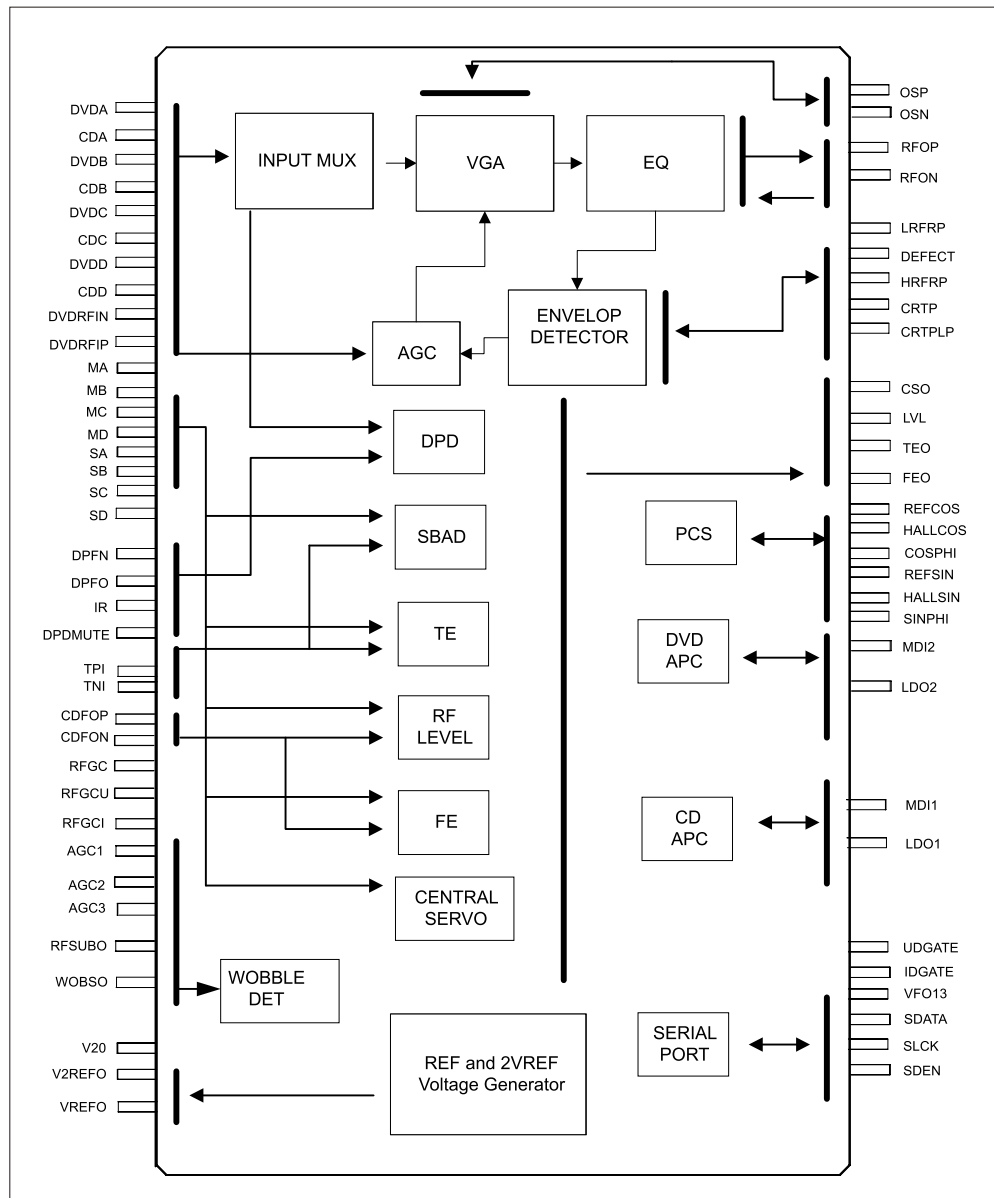
The AT5654 is a 4-channel BTL driver IC for driving the motors and actuators in products such as CD-ROM/DVD-ROM/DVD-Player drives. Two of the channels use current feedback to minimize the current phase shift caused by the influence of load inductance. Driver IC generates the focus signal and the tracking signal for pick-up actuator, the sled signal for feed, spindle signal and the load signal for opening and closing of the tray. The focus signal, the tracking signal, the sled signal and the spindle signal are input into each relaxant port of the drive IC (in the order of No. 26 pin, 23, 4, and 1) and set the gain amplification and the center voltage through the internal OP-AMP and drive on both sides and then the focus signal and the tracking signal will be output as VOFC+, VOFC- and VOTK+, VOTK- on actuator, the sled signal and the spindle signal will be output as VOSL+, VOSL- and VOLD+, VOLD- on each motor. For the load signal the input opening/closing signal is output as VOTR+, VOTR- through



Motor Drive IC (AT5654) Block Diagram

2) DVD Servo RF IC : MT1336

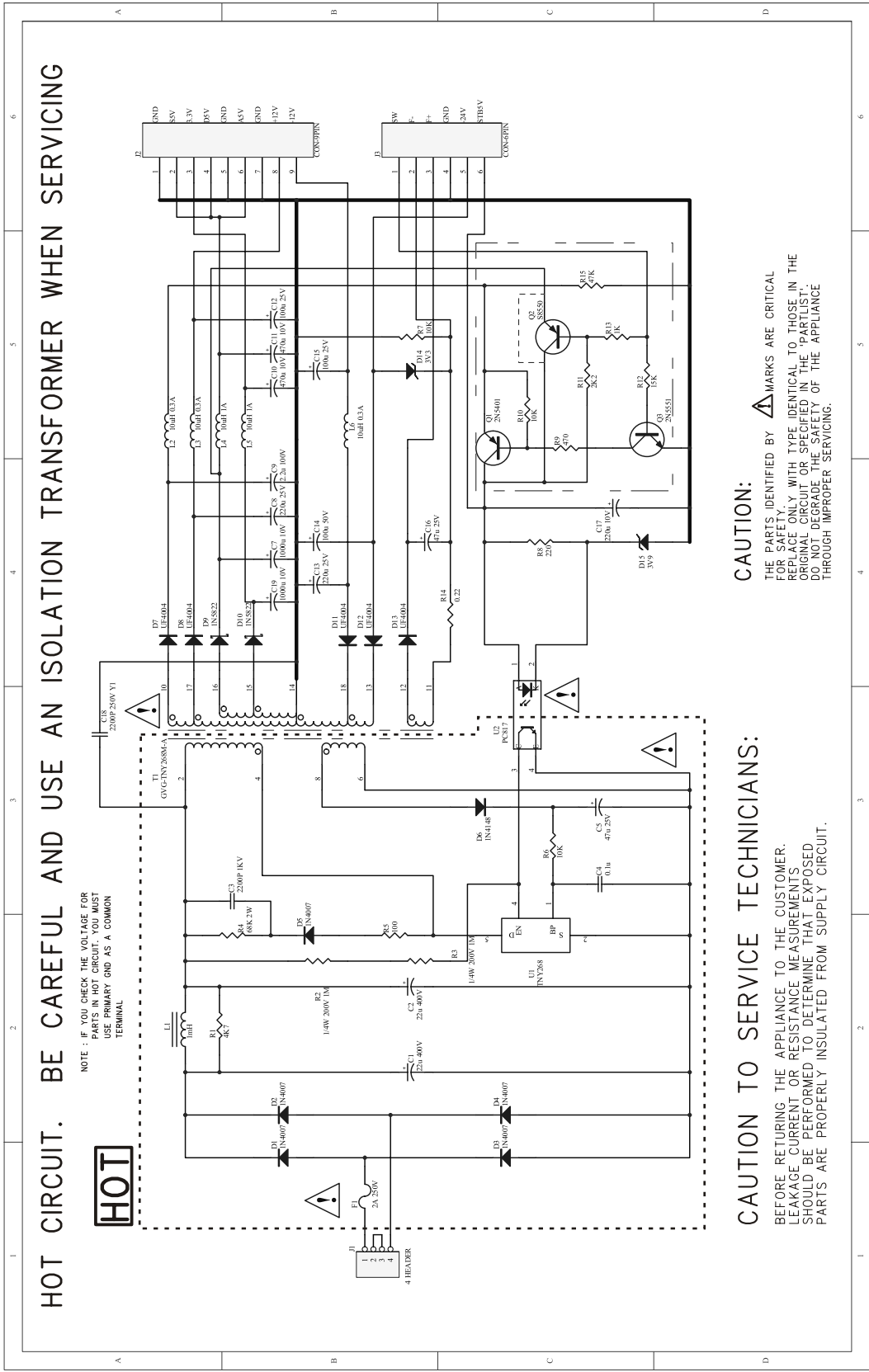
MT1336 is a high performance CMOS analog front-end IC for both CD_ROM driver up to 48XS and DVD-ROM driver up to 16XS. It also supports DVD-RAM read up to 4XS Version 2. It contains servo amplifiers to generate focusing error, 3-beam tracking error, 1 beam radial push-pull signal, RF level and SBAD for servo functions. It also includes DPD tracking error signal for DVD_ROM application. For DVD-RAM disks, there are also Differential Push-Pull (DPP) method for generating tracking signal and Differential Astigmatic Detection (DAD) for processing focusing signal. Programmable equalizer and AGC circuits are also incorporated in this chip to optimize read channel performance. In addition, this chip has dual automatic laser power control circuits for DVD-ROM (DVD-RAM) and CD-ROM separately and reference voltage generators to reduce external components. Programmable functions are implemented by the access of internal register through bi-directional serial port to configure modes selection.



MT1336 Function Block Diagram

CIRCUIT DIAGRAM

1. POWER SUPPLY SCHEMATIC DIAGRAM



2. DECODE BOARD SCHEMATIC DIAGRAM

1) INDEX & POWER SCHEMATIC DIAGRAM

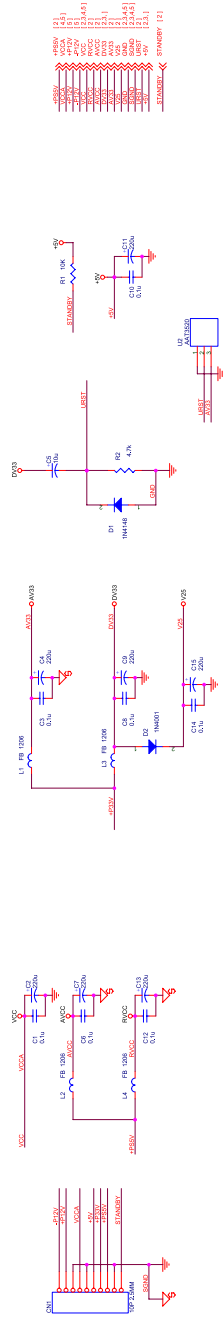
GVG1379M6-2.3
MISSIONRIGHT MT1379E (LQFP218) DVD MP Board for HOP1200

- 1 INDEX & POWER, RESET
- 2 RF / SERVO - MT1336E
- 3 MPEG - MT1379E
- 4 MEMORY - SDRAM, FLASH/EEPROM
- 5 AUDIO - WM8746/CS4340, VIDEO FILTER
- 6 AUDIO FILTER, OUTPUT

- 1 MAIN IC: MTK1379 REV :C
- 2 RF AMP: MTK1336
- 3 SDRAM: 64M/16M * 2
- 4 FLASH: 8M TSOP48/40
- 5 AUDIO DECODER: AV2188/CS4340
- 6 MOTOR DRIVER: BA5954

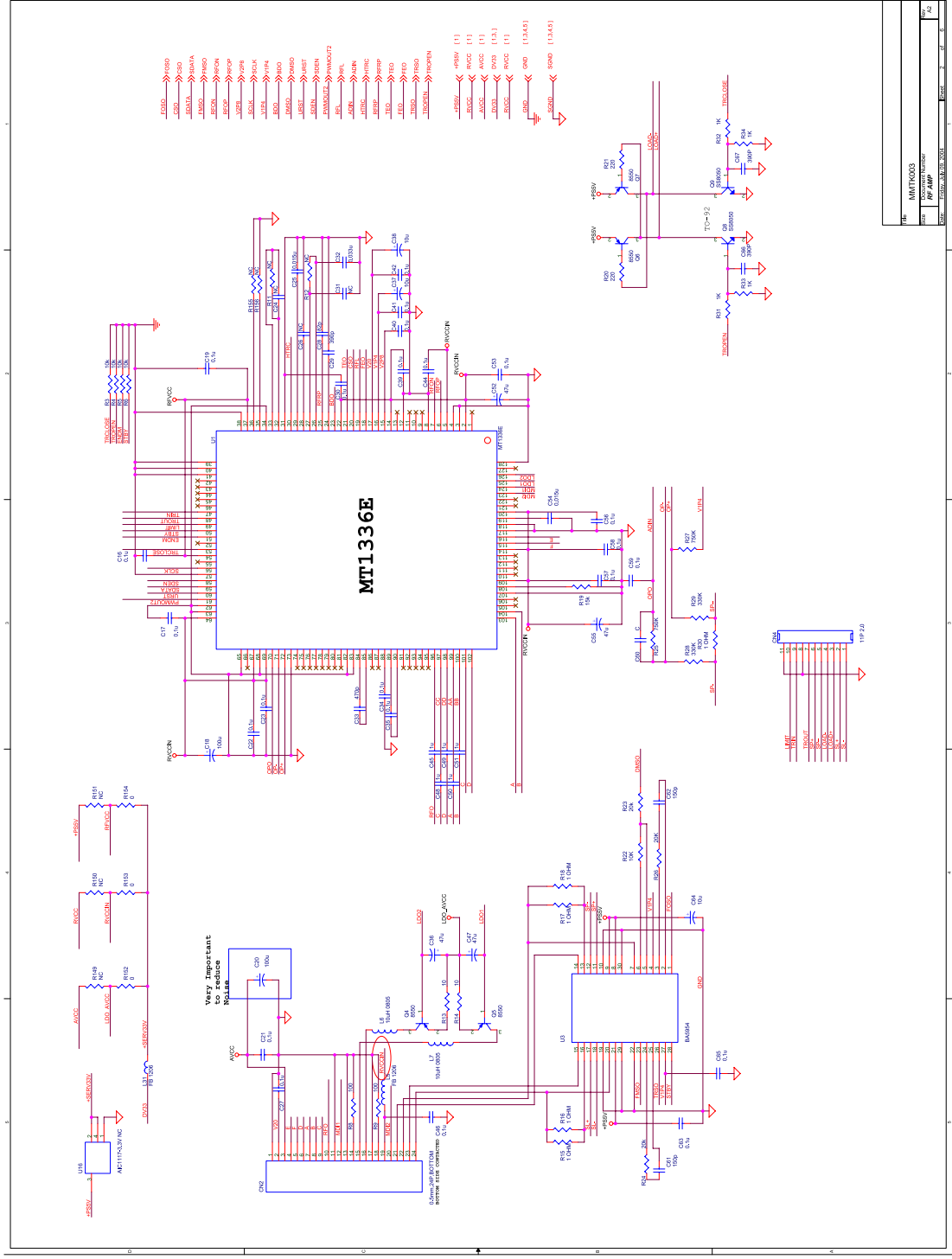
NAME	TYPE	DEVICE
VCC	Digital 5V	SUPPLY
RVCC	Servo 5V	MT1336E
AVCC	RF / SERVO	MT1336E
V33	Digital 3.3V	MT1379E
DV33	Digital 3.3V	MT1369E
AV33	Servo 3.3V	MT1369E
V25	Digital 2.5V	MT1369E
+5VA	Audio 5V	Audio DAC
+5VV	Video 5V	Video filter
+12V	Audio 12V	Audio filter

NAME	TYPE
GND	Digital Ground
SGND	Servo Analog Ground
AGND	Audio Ground
VGND	Video Ground

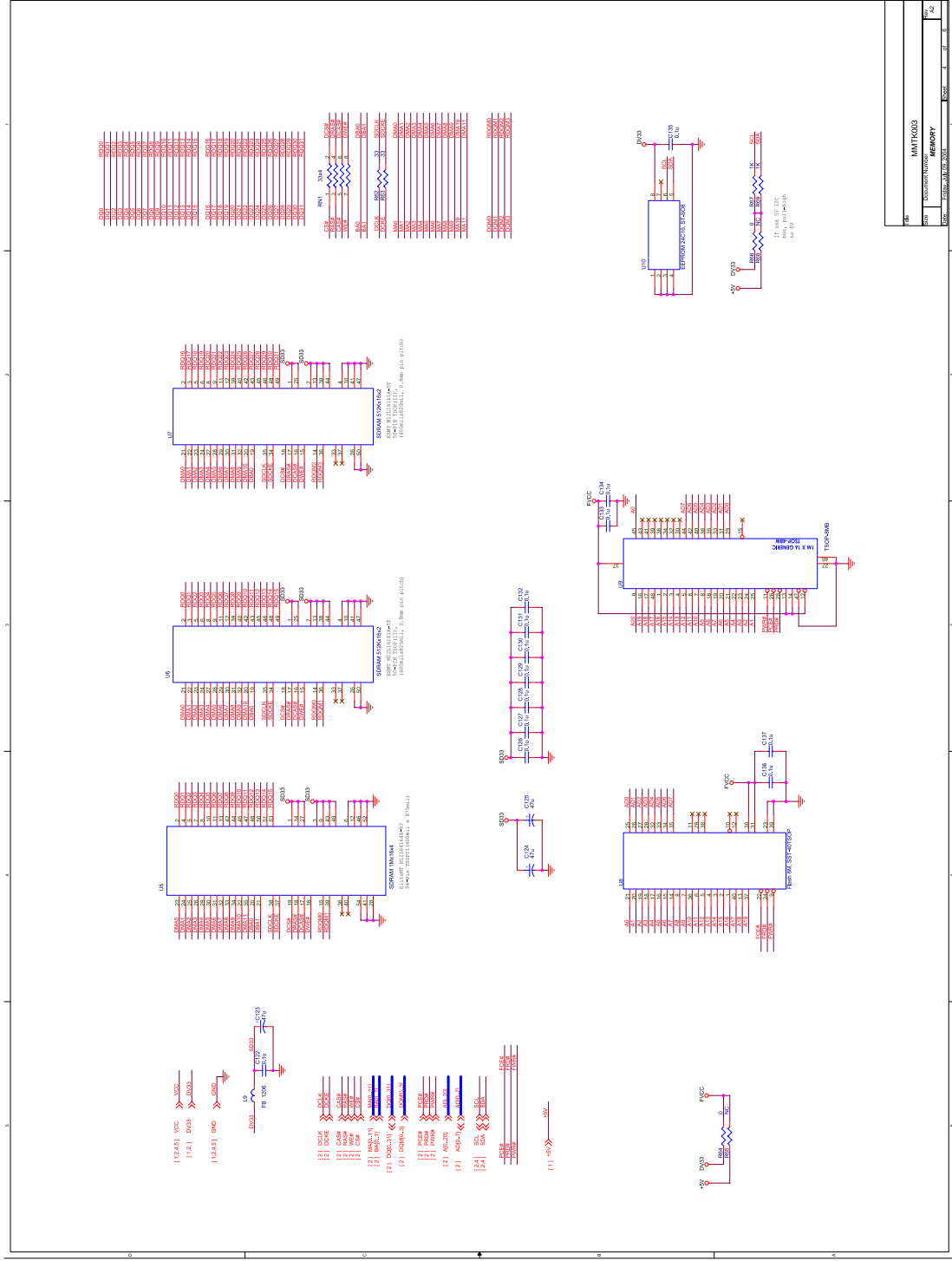


REV	MT1379E
DATE	2004.04.05
DESIGNER	INDEX & POWER
DATE	2004.04.05

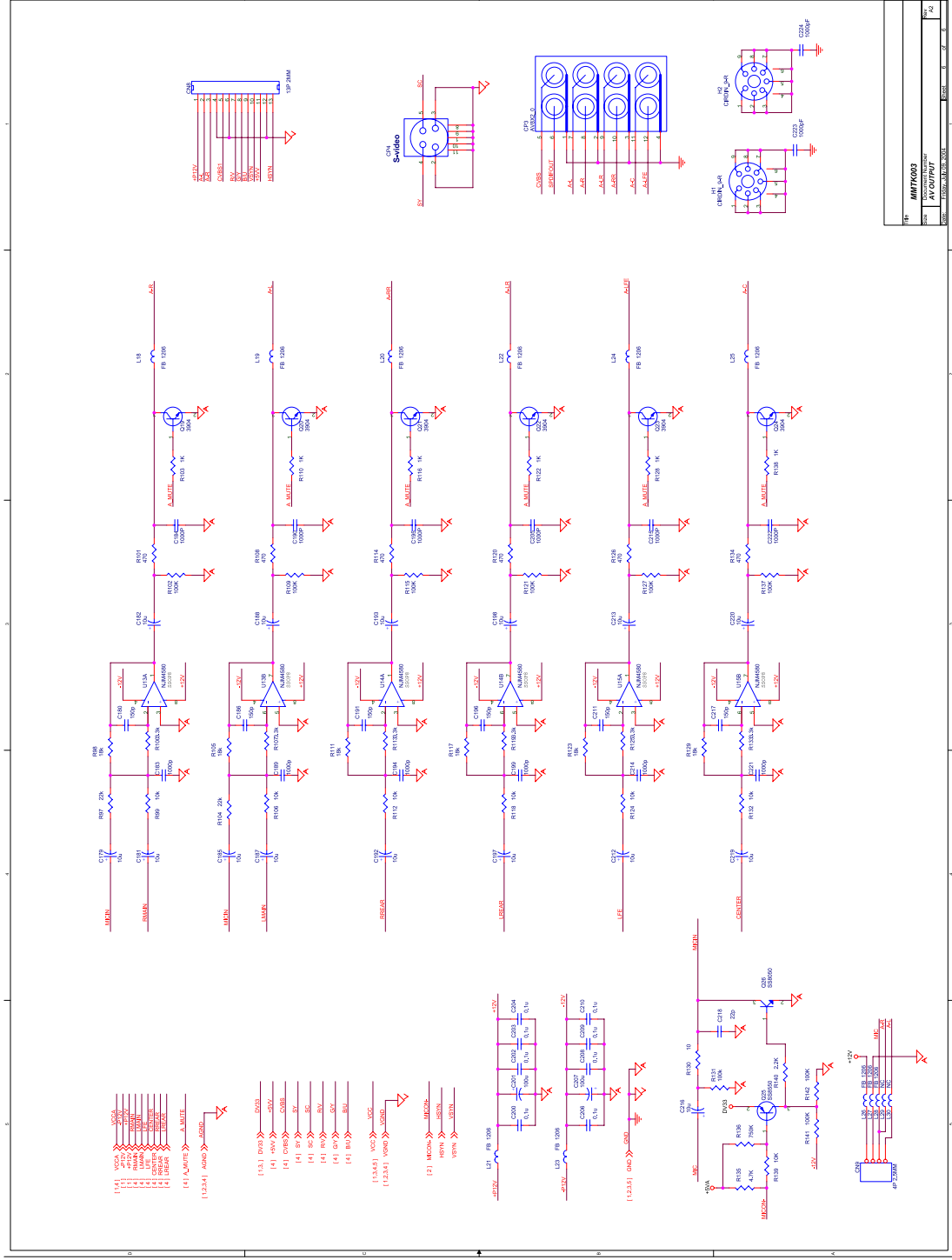
2) RF / SERVO SCHEMATIC DIAGRAM



4) SDRAM , FLASH / EEPROM SCHEMATIC DIAGRAM



6) AV OUTPUT SCHEMATIC DIAGRAM



PARTS LIST	
QTY	DESCRIPTION
1	12V REGULATOR
1	5V REGULATOR
1	4Ω SPEAKER
1	2W POWER RATING

Level	Part code	Part name	Specification	Unit	Dosage	Location	Rem
0	6020443	DVD unit	DG-K23 (Miami) 2CH MTK1379C+268	PCS	1.00		
1	0900001	Battery	7#电池 英文 环保 无汞	PCS	2.00		
1	1100001	Ferrite core	outside Φ28mm inside Φ16mm H:7.5mm	PCS	0.00	Outside machining	
1	1270001	Plastic tie	black 120mm	PCS	1.00	For power cord	
1	1270002	Plastic tie	nylon 80mm	PCS	4.00		
1	5450048	PVC sheet	146x64x0.5mmPVC	PCS	1.00	The back of power pcb	
1	1310071	Connector	2.54双头9P*320mm红白排	PCS	1.00		
1	1350034	Power cord	二扁头有极性UL认证(Dongju) (outside 1.5m尾卡	PCS	1.00		
1	1360001	AV cable	Audio 4 pin ,white red , L:1.5m	PCS	1.00		
1	1360002	AV cable	Video 2 pin , yellow , L:1.5m	PCS	1.00		
1	1640053	DVD loader	slim SHD-2503HYJ-02A HOP-1200W(with bus wire	PCS	1.00		
1	2500001	Gift box Hand	plastic white	PCS	1.00		
1	3000108	Top cover	DW6 (silver) DAEW00 press word	PCS	1.00		
1	3010108	Bottom cover	DW12-MTK1379 (shinwa loader) -268	PCS	1.00		
1	5450054	Rear PVC sheet	DG-K23 (Panama)	PCS	1.00	Rear panel	
1	2010072	CD door	DW12 CD door (silver)	PCS	1.00		
1	3500058	Screw	螺钉BM3*6彩锌	PCS	6.00	power pcb 4, mpeg pcb2	
1	3500084	Screw	平头三角螺钉BB3*8彩 Φ5	PCS	3.00	Audio optical jack 3	
1	3500085	Screw	平头三角螺钉BB3*10彩 Φ5	PCS	1.00	Yuv pcb 1	
1	3500007	Screw	带帽加硬螺钉BTPW3*6彩	PCS	8.00	Top cover8	
1	3500004	Screw	带帽加硬螺钉BTPW3*8彩	PCS	4.00	loader 1	
1	4050291	Gift box	DG-K23 (Panama)	PCS	1.00		
1	4500063	Pad foam	DW6 left	PCS	1.00		
1	4500064	Pad foam	DW6 right	PCS	1.00		
1	4600004	Poly bag for r	480*580mm	PCS	1.00		
1	4600005	PE bag for r	04*230*370mm	PCS	1.00		
1	4600006	PE bag for r	04*80*260mm	PCS	1.00		
1	5000046	Mask tape	10mm*15mm	PCS	1.00	For bus wire (Mpeg board)	
1	5000047	Mask tape	50mm*10mm	PCS	1.00	For bus wire(bottom cover)	
1	5440073	Cushion for se	3816 (front) 46.6*6.6*8mm rigidity64	PCS	2.00		
1	5440074	Cushion for se	3816 (behind) Φ15.5mm thickness3mm rigidity	PCS	2.00		
1	5450002	PVC sheet	90x70x0.5mmPVC	PCS	1.00	under topcover over power trans	
1	5750037	Power pcb ass	GV-DPA268-13 (NO STANDBY)	PCS	1.00		
2	0000024	R carbon fil	1/4W 150E ±5%	PCS	1.00	R8	
2	0000032	R carbon fil	1/4W 4.7K ±5%	PCS	1.00	R1	
2	0000034	R carbon fil	1/4W 10K ±5%	PCS	2.00	R6, R7	
2	0000045	R carbon fil	1/4W 1M ±5%	PCS	2.00	R2, R3	
2	0000063	R carbon fil	2W 68K ±5%	PCS	1.00	R4	

2	0000068	R carbon fil	1/4W 100E ±5%		PCS	1.00	R5	
2	0072001	Fuse R	1/4W 0.22E ±5%		PCS	1.00	R14	
2	0110002	C cera ac	250V2200PF ±20% Y1		PCS	1.00	C18	
2	0150008	C cera	104 50V ±10% 5		PCS	1.00	C4	
2	0150011	C cera	1KV4700PF ±10% Y5P		PCS	1.00	C3	
2	0190030	C electro	16V 100UF ±20% D5		PCS	2.00	C12, C15	
2	0190088	C electro	16V 220UF ±20% D6 105℃		PCS	2.00	C8, C13	
2	0190025	C electro	10V 470UF ±20% D8		PCS	2.00	C10, C11	
2	0190089	C electro	10V 1000UF ±20% D8 105℃		PCS	2.00	C7, C19	
2	0190026	C electro	10V 220UF ±20%		PCS	1.00	C17	
2	0190087	C electro	50V 100UF ±20% D8		PCS	1.00	C14	
2	0190040	C electro	25V 47UF ±20% D5		PCS	2.00	C5, C16	
2	0190083	C electro	400V 22UF ±20% D16		PCS	2.00	C1, C2	
2	0250015	Coil	工形电感 1A 10uH		PCS	2.00	L4, L5	
2	0250016	Coil	磁芯电感 0.2A3.3uH		PCS	2.00	L3, L6	
2	0250041	Coil	色环电感1mH 200mA		PCS	1.00	L1	
2	0300010	Power trans	GVG-TNY268M-A		PCS	1.00	T1	
2	0320003	Diode	UF4004		PCS	4.00	D8, D11, D12, D13	
2	0320004	Diode	1N4148		PCS	1.00	D6	
2	0320005	Diode	1N4007		PCS	5.00	D1~5	
2	0320010	Diode	1N5817		PCS	1.00	D10	
2	0380004	Diode schot	SR360 3A60V		PCS	1.00	D9	
2	0330007	Diode zener	3.9V 1/2W		PCS	1.00	D15	
2	0330016	Diode zener	3.3V 1/2W		PCS	1.00	D14	
2	0510175	IC	TNY268P		PCS	1.00	U1	
2	0640001	IC photo coup	PC817B		PCS	1.00	U2	
2	1000115	PCB	GV-DPATNY268-1 Power pcb		PCS	1.00		
2	1150059	Conn wafer	XH-2Pin 3.96mm		PCS	1.00	CON1	
2	1150003	Conn wafer	XH-4Pin 2.54mm		PCS	1.00	J3	
2	1150043	Conn wafer	XH-9Pin 2.54mm		PCS	1.00	J2	
2	1260006	Jumper	Pin distance 10mm		PCS	2.00	J1, CON1	
2	1400009	Sleeve	石棉套管Φ1.5mm L:10mm	M		2.00	D10	
2	1450006	Fuse	1A 250V UL	PCS		1.00	F1	
2	1460002	Fuse jack	Metal jack	PCS		2.00	F1	
2	3670001	Washer	Metal washerΦ3.2 (GND)	PCS		1.00		
2	1260002	Jumper	Pin distance:5mm	PCS		1.00	Q2	
1	5760020	YUV pcb assy	GV-PDV950YUV12	PCS		1.00		
2	0190025	C electro	10V 470UF ±20% D8	PCS		3.00	C1, C2, C3	
2	1000054	PCB	GV-DV950 YUV-2 pcb	PCS		1.00		
2	1150103	AV jack	3 jacks AV3-8, 4-10D	PCS		1.00	RCA1	

2	1260003	Jumper	Pin distance:6mm		PCS	4.00	J3, R9 to R11, R6 to R8, R2 to R4	
2	1310356	Connector	2.0双头6P*100mm红白排带针空3P with ring		PCS	1.00	CZ1	
1	5780218	Front panel ass	DG-K23 silver		PCS	1.00		
2	2000237	Front panel	DG-K23 (silver) new		PCS	1.00		
2	2200053	Volume knob	DW12 (silver)		PCS	1.00		
2	5710054	Mic pcb assy	GV-DMADW-6-01		PCS	1.00		
3	0000005	R carbon fil	1/6W 10K ±5%		PCS	9.00	R5, R7, R10, R15, R19, R22, R23, R28, R29	
3	0000002	R carbon fil	1/6W 1K ±5%		PCS	4.00	R13, R21, R26, R27	
3	0000015	R carbon fil	1/6W 15K ±5%		PCS	1.00	R11	
3	0000020	R carbon fil	1/6W 100K ±5%		PCS	2.00	R20, R24	
3	0000004	R carbon fil	1/6W 4.7K ±5%		PCS	1.00	R2	
3	0000018	R carbon fil	1/6W 47K ±5%		PCS	2.00	R12, R14	
3	0000013	R carbon fil	1/6W 1.5K ±5%		PCS	1.00	R3	
3	1150027	Mic jack	Mic jack with 7 pins		PCS	1.00	MIC1	
3	0510129	IC	F4558N (DIP)		PCS	1.00	U2	
3	0510058	IC	TP5299P		PCS	1.00	U1	
3	0250006	bead core	RH3. 5*4. 7*0. 8		PCS	1.00	L1	
3	0190008	C electro	50V 4. 7UF ±20% D5		PCS	4.00	C20, C29, C30, C19	
3	0190039	C electro	25V 22UF ±20% D5		PCS	3.00	C3, C1, C18	
3	0190031	C electro	50V 3. 3UF ±20%		PCS	1.00	C15	
3	0190030	C electro	16V 100UF ±20% D5		PCS	2.00	C2, C22	
3	0150008	C cera	104 50V ±10% 5		PCS	4.00	C5, C10, C4, C23	
3	0150007	C cera	101 50V ±10%		PCS	2.00	C24, C25	
3	0150001	C cera	563 50V ±10%		PCS	2.00	C8, C9	
3	0150003	C cera	102 50V ±10%		PCS	2.00	C28, C27	
3	0150014	C cera	222 50V ±10%		PCS	2.00	C6, C7	
3	0150015	C cera	223 50V ±10%		PCS	2.00	C12, C13	
3	0150013	C cera	103 50V ±10%		PCS	1.00	C14	
3	1000213	PCB	GV-DMA-DW-6 REV:01 Mic pcb		PCS	1.00		
3	1310142	Connector	2. 54双头4P/3P*600mm屏蔽线带针		PCS	1.00		
3	1100003	Ferrite core	outside Φ16mm inside Φ12mm H:8mm		PCS	1.00		
3	0190012	C electro	50V 10UF ±20%		PCS	4.00	C16, C17, C21, C26	
3	0000113	R carbon fil	1/6W 33K ±5%		PCS	1.00	R1	
3	0450013	TR	C1815 β=70~700		PCS	2.00	Q1, Q2	
3	0000061	R carbon fil	1/6W 33E ±5%		PCS	1.00	R9	
3	0330001	Diode zener	5. 6V 1/2W		PCS	1.00	D1	
3	0000062	R carbon fil	1/6W 6. 8K ±5%		PCS	2.00	R4, R8	
3	0000072	R carbon fil	1/6W 27k ±5%		PCS	1.00	R6	
3	1260002	Jumper	Pin distance:5mm		PCS	1.00	JMP1, JMP2	
3	0000006	R carbon fil	1/6W 12K ±5%		PCS	1.00	R18	
3	0000153	R carbon fil	1/6W 39K ±5%		PCS	1.00	R25	

3	0100011	Pot	R0903NE-F20-C20K 3pin	PCS	1.00	VR1	
3	0190013	C electro	16V 220UF ±20% D6	PCS	1.00	C11	
3	0000125	R carbon fil	1/8W 2.2K ±5%	PCS	1.00	R17	
3	0450002	TR	2SA1015	PCS	1.00	Q3	
2	2100212	Knob	DW12 STAND BY key (silver)	PCS	1.00		
2	2100213	Knob	DW12 play key (silver)	PCS	1.00		
2	3500081	Screw	带帽加硬螺钉BTPW3*8彩(介子Φ9.0mm)	PCS	2.00	mic base 2	
2	3500005	Screw	平头三角螺钉BB3*8彩	PCS	11.00	Control pcb 7, metal base4	
2	2100214	Knob	DW12 open key (silver)	PCS	1.00		
2	5730117	Control pcb as	GV-DCADW-12-01 (STANDBY)	PCS	1.00		
3	0000019	R carbon fil	1/6W 51K ±5%	PCS	1.00	R10	
3	0000005	R carbon fil	1/6W 10K ±5%	PCS	7.00	R3~R9	
3	1260006	Jumper	Pin distance:10mm	PCS	1.00	JMP3	
3	0190095	C electro	16V 100UF ±20% D6*8	PCS	1.00	C1	
3	1310326	Connector	无端头4P*250mm红白排	PCS	1.00	CN3-CN4	
3	0320004	Diode	1N4148	PCS	2.00	D1, D2	
3	0510012	IC	PT6312LQ	PCS	1.00	IC2	
3	0710030	VFD	Hua lian HL-D331C	PCS	1.00	VFD1	
3	1000211	PCB	GV-DW-12 REV:01 control pcb	PCS	1.00		
3	0800001	Tac switch	6*6*5	PCS	7.00	SW1~SW7	
3	1310149	Connector	2.54单头4P*450mm红白排	PCS	1.00	CN1	
3	1310330	Connector	2.54单头6P*300mm红白排~2~3 across	PCS	1.00	CN2	
3	1100002	Ferrite core	outside Φ22.5mm inside Φ13.8mm H:6.4mm	PCS	1.00	On conn from control pcb to mpeg pcb	
3	1260015	Jumper	Pin distance:11mm	PCS	2.00	JMP5, JMP6	
3	1260005	Jumper	Pin distance:8mm	PCS	2.00	JMP2, JMP4	
3	5440014	Cushion	10x10x3mm(single side with glue)EVI	PCS	2.00	For VFD	
3	5440040	Cushion	8x8x5mm(single side with glue)EVI rigidity5	PCS	1.00	For remocon receiver	
3	0000142	R carbon fil	1/6W 100E ±5%	PCS	1.00	R1	
3	0152001	C cera	104 50V -20%+80%	PCS	1.00	C2	
3	0340001	LED diode	普通红色圆头 Φ3mm red	PCS	1.00	LED	
3	1260002	Jumper	Pin distance:5mm	PCS	1.00	JMP1	
3	1500003	Receiver	PIC-317LM	PCS	1.00	REM	
3	1500005	Receiver	for remote control FLIRM1030-6	PCS	0.00	REM	
3	1500011	Receiver	for remote control PIC-331LM	PCS	0.00	REM	
3	0000071	R carbon fil	1/6W 220E ±5%	PCS	1.00	R11	
2	2120016	LED tube	DW12	PCS	1.00		
2	3900090	Metal base	DW12 for front panel	PCS	1.00		
2	2300122	Window	for VFD DW12 (brown)	PCS	1.00		
1	5800287	Mpeg board	DG-K23 MTK1379C-8P-02 (5700140)	PCS	1.00		
2	5700140	Mpeg pcb	GVG1379CM6-8P-02(2.0)AE MIC 32M SDRAM	PCS	1.00		
3	0050001	R chip	1/16w 0E ±5% 0603	PCS	8.00	R39, R40, R54, R65, R66, R152, R153, R154	
3	0050002	R chip	1/16w 10E ±5% 0603	PCS	6.00	R44, R58, R59, R13, R14, R130	
3	0050004	R chip	1/16w 33E ±5% 0603	PCS	5.00	R62, R63, R72, R73, R95	

3	0050007	R chip	1/16w100E ±5% 0603		PCS	4.00	R8, R9, R92, R93	
3	0050009	R chip	1/16w150E ±5% 0603		PCS	2.00	R78, R77	
3	0050013	R chip	1/16w220E ±5% 0603		PCS	2.00	R20, R21	
3	0050018	R chip	1/16w470E ±5% 0603		PCS	2.00	R101, R108	
3	0050019	R chip	1/16w 1K ±5% 0603		PCS	10.00	R31, R32, R33, R34, R46, R56, R67, R69, R103, R110	
3	0050021	R chip	1/16w2. 2K ±5% 0603		PCS	1.00	R82	
3	0050023	R chip	1/16w3. 3K ±5% 0603		PCS	2.00	R100, R107	
3	0050026	R chip	1/16w4. 7K ±5% 0603		PCS	3.00	R2, R86, R135	
3	0050028	R chip	1/16w 10K ±5% 0603		PCS	12.00	R1, R3, R4, R5, R6, R22, R55, R84, R88, R99, R106, R139	
3	0050031	R chip	1/16w 15K ±5% 0603		PCS	2.00	R57, R19	
3	0050032	R chip	1/16w 18K ±5% 0603		PCS	3.00	R45, R98, R105	
3	0050033	R chip	1/16w 20K ±5% 0603		PCS	5.00	R23, R24, R26, R97, R104	
3	0050036	R chip	1/16w100K ±5% 0603		PCS	9.00	R36, R41, R87, R90, R102, R109, R131, R141, R142	
3	0050042	R chip	1/16w6. 8K ±5% 0603		PCS	1.00	R80	
3	0050051	R chip	1/16w 1E ±5% 0603		PCS	5.00	R15, R16, R17, R18, R30	
3	0050052	R chip	1/16w 33K ±5% 0603		PCS	2.00	R52, R53	
3	0050053	R chip	1/16w4. 7E ±5% 0603		PCS	7.00	R35, R37, R43, R47, R60, R61, R70	
3	0050054	R chip	1/16w750K ±5% 0603		PCS	4.00	R25, R27, R51, R136	
3	0050055	R chip	1/16w8. 2K ±5% 0603		PCS	1.00	R48	
3	0050122	R chip	1/16w 62E ±5% 0603		PCS	6.00	R163, R164, R165, R166, R167, R168	
3	0050060	R chip	1/16w330K ±5% 0603		PCS	2.00	R29, R28	
3	0050062	R chip	1/16w160E ±1% 0603		PCS	17.00	R74, R76, R85, R91, R96, R71, R75, R79, R83, R89, R94, R157, R158, R159, R160, R161, R162	
3	0060002	R chip	1/16w33E*4 ±5% 0603		PCS	2.00	RN2, RN1	
3	0190007	C electro	25V 470UF ±20% D8		PCS	2.00	C157, C163	
3	0190013	C electro	16V 220UF ±20% D6		PCS	7.00	C2, C4, C7, C9, C11, C13, C15	
3	0190036	C electro	16V 100UF ±20% D6		PCS	5.00	C18, C20, C121, C201, C207	
3	0190041	C electro	25V 220UF ±20% D8		PCS	1.00	C161	
3	0190033	C electro	25V 10UF ±20% D5		PCS	20.00	C5, C37, C38, C64, C68, C70, C81, C139, C141, C147, C150, C152, C178, C179, C181, C182, C185, C187, C188, C216	
3	0190045	C electro	25V 47UF ±20% D6		PCS	11.00	C36, C47, C52, C55, C79, C93, C97, C101, C123, C124, C125	
3	0200015	C chip	153 50V ±10% 0603		PCS	3.00	C25, C54, C114	
3	0200016	C chip	333 50V ±10% 0603		PCS	1.00	C32	
3	0200017	C chip	103 50V ±10% 0603		PCS	6.00	C105, C106, C107, C108, C109, C113	
3	0201001	C chip	22P 50V ±5% 0603		PCS	6.00	C218, C142, C146, C156, C162, C173	
3	0201004	C chip	151 50V ±5% 0603		PCS	4.00	C61, C62, C180, C186	
3	0201005	C chip	27P 50V ±5% 0603		PCS	2.00	C90, C92	
3	0201006	C chip	391 50V ±5% 0603		PCS	3.00	C29, C66, C67	
3	0201007	C chip	471 50V ±5% 0603		PCS	1.00	C33	

3	0201008	C chip	102	50V	±5%	0603	PCS	13.00	C96, C99, C100, C183, C184, C189, C190, C223, C224, C194, C199, C214, C221	
3	0201010	C chip	101	50V	±5%	0603	PCS	4.00	C102, C112, C118, C28	
3	0201023	C chip	11P	50V	±5%	0603	PCS	10.00	C143, C144, C153, C154, C158, C159, C164, C165, C174, C175	
3	0201011	C chip	331	50V	±5%	0603	PCS	3.00	C115, C116, C172	
3	0202001	C chip	0.1U	50V	+80%-20%	0603	PCS	81.00	C1, C3, C6, C8, C10, C12, C14, 16~17, C19, 21~23, C27, C30, 34~35, 39~42, C44, C46, C53, 56~59, C63, C65, C69, 71~78, C80, 82~89, 94~95, C98, C103, C111, C122, 126~138, C140, 148~149, C151, C171, C177, C200, 202~204, C206, 208~210	
3	0202002	C chip	1U	16V	+80%-20%	0603	PCS	8.00	C45, C48, C49, C50, C51, C104, C119, C120,	
3	0250017	C chip	1U	16V	+80%-20%	0603	PCS	16.00	L5, L9, L10, L11, L18, L19, L21, L23, L26, L27, L28, L31, L1, L2, L4, L16	
3	0250018	Bead core chip	(1206)	FB			PCS	2.00	L7, L6	
3	0250020	Coil chip	(0805)	10UH			PCS	5.00	L12, L13, L14, L15, L17	
3	0320006	Coil chip	(0805)	1.8UH			PCS	1.00	D2	
3	0390001	Diode	1N4001				PCS	17.00	D1, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18	
3	0450017	Diode chip	1N4148				PCS	2.00	Q6, Q7	
3	0450018	TR	S8050	(DIP	EBC)		PCS	2.00	Q8, Q9	
3	0460001	TR chip	2N3904				PCS	2.00	Q19, Q20	
3	0460006	TR chip	SS8550	(SOT23)			PCS	5.00	Q4, Q5, Q13, Q14, Q25	
3	0460007	TR chip	2N3906	(SOT23)			PCS	7.00	Q16, Q10, Q11, Q12, Q15, Q17, Q18	
3	0460008	TR chip	SS8050	(SOT23)			PCS	1.00	Q26	
3	0510013	IC	CS4340-KS	(SOP)			PCS	1.00	U11	
3	0510316	IC	AE39S2016-7	TRI-ZIP	2*16M		PCS	1.00	U5	
3	0510130	IC	F4558S	(SOP)			PCS	1.00	U13	
3	0510154	IC	MT1336E	+3.3V	C		PCS	1.00	U1	
3	0510147	IC	AT5654	(SOP)			PCS	1.00	U3	
3	0510146	IC	AT24C16AN	(SOP)			PCS	1.00	U10	
3	0510119	IC	AT49F8192AT				PCS	1.00	U9	
3	0510221	IC	MT1379AE	C			PCS	1.00	U4	
3	0610010	X -tal	27MHz	27P	(基频HC-49/S)		PCS	1.00	Y1	
3	1000233	PCB	MMTK003	REV:B2	mpeg	pcb	PCS	1.00		
3	1150003	Conn wafer	XH-4Pin	2.54mm			PCS	1.00	CN9	
3	1150005	Conn wafer	XH-6Pin	2.54mm			PCS	1.00	CN5	
3	1150106	AV jack	4 jacks	AV4-8, 4-13D			PCS	1.00	CP3	
3	1150115	S-video jack	DSW-007				PCS	1.00	CP4	
3	1150035	Conn wafer	XH-6Pin	2.0mm			PCS	1.00	CN7	
3	1150037	Conn wafer	XH-4Pin	2.0mm			PCS	1.00	CN6	
3	1150039	Conn wafer	HOP1200/-24Pin	0.5mm			PCS	1.00	CN2	
3	1150041	Conn wafer	XH-9Pin	2.0mm			PCS	1.00	CN4	
3	1150043	Conn wafer	XH-9Pin	2.54mm			PCS	1.00	CN1	
3	0050084	R chip	1/16w1.3K	±5%	0603		PCS	1.00	R50	
3	0050099	R chip	1/16w82E	±5%	0603		PCS	1.00	R140	
3	1150105	Optical jack	TX179AFT				PCS	1.00	CP1	
3	0050011	R chip	1/16w180E	±5%	0603		PCS	1.00	R81	

3	0510220	IC	AMS1117 (SOT-223)	PCS	1.00	U16	
1	5900065	Remote control	DVG-8500N	PCS	1.00		
1	1310352	Connector	2.0双头9P*150mm红白排1~3 across	PCS	1.00	from loader to Mpeg board	
1	4500071	Pad foam	DVD 310*40*18mm	PCS	2.00	On top cover	
1	4600013	PE bag	for power cord 04*80*240mm	PCS	1.00		
1	5300372	Manual	DG-k23 (Panama)	PCS	1.00		
1	5440032	Cushion	15x10x2.5mm(single side with glue)EVI rigid	PCS	2.00	on loader	
1	0510151	IC	S0110GS-685 (GVC2003)	PCS	1.00	for remocon	
1	4500073	Pad foam	DVD泡沫290*45*23mm	PCS	1.00	at the front of panel	
1	5450036	PVC sheet	60x60x0.5mmPVC(single side with glue)	PCS	1.00	Under Mic pcb	
1	3820033	Logo label	PVC(DVD) label 16.3*8.8*0.4mm	PCS	1.00	on CD door	