



Pin No.	Mark	I/O Division	Function
7	TEMP	O	Temperature sensor amp output terminal
8	ADIP	O	ADIP signal output terminal
9	TOFS	I	Tracking error offset adjustment terminal
10	TBAL	I	Tracking ballance adjustment input terminal
11	TE	O	Tracking error signal output terminal
12	CRS IN	I	Track cross input terminal
13	TGAIN	I	Tracking gain adjustment input terminal
14	LNP	O	Lens position signal output terminal
15	AB GAIN	I	APP compensation signal gain adjustment terminal
16	FE	O	Focus error signal output terminal
17	AS GAIN	I	AS gain adjustment input terminal
18	FBAL	I	Focus ballance adjustment input terminal
19	AS/MON3T	O	AS/3TMON signal output terminal
20	CEA	I	3T envelope det. capacitor connection terminal (Connected to power supply through capacitor)
21	BDO/TRCRS	O	BDO/Track cross signal output terminal
22	CBD O	O	BDO detection capacitor connection terminal (Connected to GND through capacitor)
23	OFT O	O	Off track detection signal output terminal
24	GND	—	GND terminal
25	OFT IN	I	Off track detection signal input terminal
26	VCC	I	Power supply terminal (+3V)
27	NRFDET/OFTR	O	NRFDET/off track signal output terminal
28	NRFLD	I	Serial command latch signal input terminal
29	RF DATA	I	Serial command data signal input terminal
30	RFCK	I	Serial command clock input terminal
31	NRFSTBY	I	Standby control signal input terminal
32	OUT RF	O	EFM signal output terminal
33	CRF AGC	—	RFAGC capacitor connection terminal (Connected to GND through capacitor)
34	EQ IN	I	EQ input terminal
35	ARFO	O	RF amp. output terminal
36	SVREF	I	Reference voltage input terminal
37	VREF	I	Reference voltage input terminal
38	RF1	I	RF1 signal input terminal
39	RF2	I	RF2 signal input terminal
40	F1	I	F1 signal input terminal
41	F2	I	F2 signal input terminal
42	CLPF1	I	APP compensation LPF capacitor input terminal
43	CLPF2	—	RF equalizer adjustment resistor connection terminal (Connected to power supply through resistor)
44~47	A~D	I	Main beam A~D signal input terminal
48	CENVC	I	Beam E signal detection capacitor input terminal

15.2. IC101 (M6616RB1) : ATRAC ENCODER/DECORDER, SERVO SIGNAL PROCESSOR

Pin No.	Mark	I/O Division	Function
1	ADIP	I	ADIP FM signal input terminal
2	LNP	I	Lens position signal input terminal
3	FE	I	Focus error signal input terminal
4	TE	I	Tracking error signal input terminal
5	AS	I	AS signal input terminal
6	DRMONI	I	Drive voltage monitor input terminal
7	BAT	I	Battery power supply terminal
8	AMONI	—	Servo analog monitor signal output (Not used, open)
9	VREFI	I	Reference voltage input terminal
10	TOFS	O	Tracking off-set adjustment output terminal
11	FBAL	O	Focus balance adjustment output terminal
12	TBAL	O	Tracking balance adjustment output terminal
13	TGAIN	O	TE error gain adjustment output terminal
14	ASGAIN	O	Main beam amp gain adjustment output terminal
15	ABGAIN	O	APP adjustment output terminal
16	AV _{DD} 1	I	Power supply terminal
17	AV _{SS} 1	—	GND terminal
18	TRDP	O	Tracking drive (+) PWM signal output terminal
19	TRDM	O	Tracking drive (-) PWM signal output terminal
20	FODP	O	Focus drive (+) PWM signal output terminal
21	FODM	O	Focus drive (-) PWM signal/focus, tracking ON/OFF signal output terminal
22	SPDP	O	Spindle drive (+) PWM signal output terminal
23	DIR	O	Spindle drive (-) PWM signal output terminal
24	DV _{DD} 0	I	Power supply terminal
25	FG	I	FG input terminal
26	STPO0	O	Stepper drive signal 0 output terminal
27	STPO1	O	Stepper drive signal 1 output terminal
28	IVDD0	I	Power supply terminal for I/O pad
29	DV _{SS} 0	—	GND terminal
30	RAD12	O	DRAM address output terminal (Not used, open)
31	RAD11	O	DRAM address output terminal
32	RAD10	O	DRAM address output terminal
43~46	RDT3~RDT0	I/O	DRAM data input/output terminal
47	NRAS	O	DRAM row address strobe output terminal
48	NCAS	O	DRAM culum address strobe output terminal
49	NWE	O	DRAM write enable output terminal
50	NRST	I	Reset signal input terminal
51	SELAD	I	MSP/MDA,I/F address select input terminal ("H" Address)
52	SSCK	I	MSP/MDA,I/F clock input terminal
53	SSDW	I	MSP/MDA,I/F write data input terminal
54	SSDR	O	MSP/MDA,I/F read data output terminal
55	MDISY	O	Leader synchronous signal output

Pin No.	Mark	I/O Division	Function
56	SCTSY	O	ADIP synchronous noise output terminal
57	SGSYNC	O	Frame synchronous signal output terminal
58	DVDD1	I	Power supply terminal
59	IVDD1	—	Power supply terminal for I/O pad
60	DVss1	—	GND terminal
61	FS384	O	384 Fs output terminal
62	SCL	O	Bit clock output terminal
63	SWS	O	Word clock output terminal
64	SDAP	O	Audio data output terminal
65	SDAR	I	Audio data input terminal
66	STPI1	I	Stepper status 1 input terminal
67	STPI2	I	Stepper status 2 input terminal
68	STPI0	I	Stepper status 0 input terminal
69	STPO2	O	Stepper drive signal 2 output terminal
70	RX1	I	Digital audio interface signal 1 input terminal
71	NRECP	I	Amp. Play/Rec switching signal input terminal
72	NREFM	O	EFM modulation inverted output terminal
73	REFM	O	EFM modulation inverted output terminal
74	MONI3	O	Monitor signal output (Not used)
75	MONI2	O	Monitor signal output (Not used)
76	MONI1	O	Monitor signal output (Not used)
77	MONI0	O	Monitor signal output (Not used)
78	TS3	—	Not used, connected to GND
79	TS2	—	Not used, connected to GND
80	TS1	—	Not used, connected to GND
81	TS0	—	Not used, connected to GND
82	EXSYSCK	I	External system clock input terminal (Not used, connected to GND)
83	DVDD	I	Power supply terminal
84	XI	I	Crystal oscillator input terminal (F=16.9344MHz)
85	XO	O	Crystal oscillator output terminal (F=16.9344MHz)
86	VDss2	—	GND terminal
87	RFDAT	O	RF serial data output terminal
88	RFCK	O	RF serial clock output terminal
89	NRFLD	O	RF serial load output terminal
90	TRCRS	I	Track cross input terminal
91	OFTR	I	Off-track signal input terminal
92	APCD	O	Laser power PWM output terminal
93	EXEFMCK	I	External FM clock input terminal (Not used, connected to GND through resistor)
94	PEFM1	O	EFM loop filter output terminal
95	EFMIREF	I	EFM PLL reference current input terminal
96	EFMPLLF	O	EFM PLL filter output terminal
97	PEFMS	I	EFM signal input terminal
98	AV _{DD} 0	I	Power supply terminal
99	AVss0	—	GND terminal
100	TEFSEL	—	Tracking error signal output terminal

15.3. IC301 (BD6604KVT) : FOCUS/TRACKING COIL, TRAVERSE MOTOR DRIVE, SPINDLE MOTOR DRIVE, ROTARY DETECTOR

Pin No.	Mark	I/O Division	Function
1	S GND	—	GND terminal
2	AS GND	—	GND terminal
3	PW IN 1	—	Not used, connected to GND
4	PW IN 2	I	Half bridge input terminal
5	FG	O	Speed pulse output terminal
6	BRK-	I	Brake comparator- input terminal
7	BRK+	I	Brake comparator+ input terminal (Connected to GND and power supply through resistor)
8	CSL2	I	Slope capacitor connect terminal (Connected to GND through capacitor)
9	CSL1	I	Slope capacitor connect terminal (Connected to GND through capacitor)
10	CST	I	Connected to GND through capacitor
11	SP PG2	—	GND terminal
12	SP W OUT	O	Spindle motor coil (W) output terminal
13	SP VM2	I	Power supply terminal for part of spindle power
14	NC	—	Not used, open
15	SP V OUT	O	Spindle motor coil (V) output terminal
16	NC	—	Not used, open
17	SP PG1	—	GND terminal
18	NC	—	Not used, open
19	SP U OUT	O	Spindle motor coil (U) output terminal
20	SP VM1	I	Power supply terminal for part of spindle power
21	SP COM	I	Spindle motor coil center input terminal
22	SP W IN	I	Rotor position detect comparator (W) input terminal
23	SP V IN	I	Rotor position detect comparator (V) input terminal
24	SP U IN	I	Rotor position detect comparator (U) input terminal
25	H2 PG2	—	GND terminal
26	NC	—	Not used, open
27	H2 R OUT	I	H bridge 2 reverse output terminal
28	NC	—	Not used, open
29	H2 VM	I	Power supply terminal
30	NC	—	Not used, open
31	H2 F OUT	O	H bridge 2 forward output terminal
32	NC	—	Not used, open
33	H2 PG1	I	GND terminal
34	H1 PG2	I	GND terminal
35	NC	—	Not used, open
36	H1 R OUT	O	H bridge 1 reverse output terminal
37	NC	—	Not used, open
38	H1 VM	I	Power supply terminal
39	H1 F OUT	O	H bridge 1 forward output terminal
40	H1 PG1	—	GND terminal
41	VCC1	I	Power supply terminal
42	VCC2	I	Power supply terminal
43	IN 1F	I	H bridge 1 forward input terminal
44	IN 1R	I	H bridge 1 reverse input terminal
45	IN 2F	I	H bridge 2 forward input terminal
46	IN 2R	I	H bridge 2 reverse input terminal
47	EXT CLK	I	Not used, open