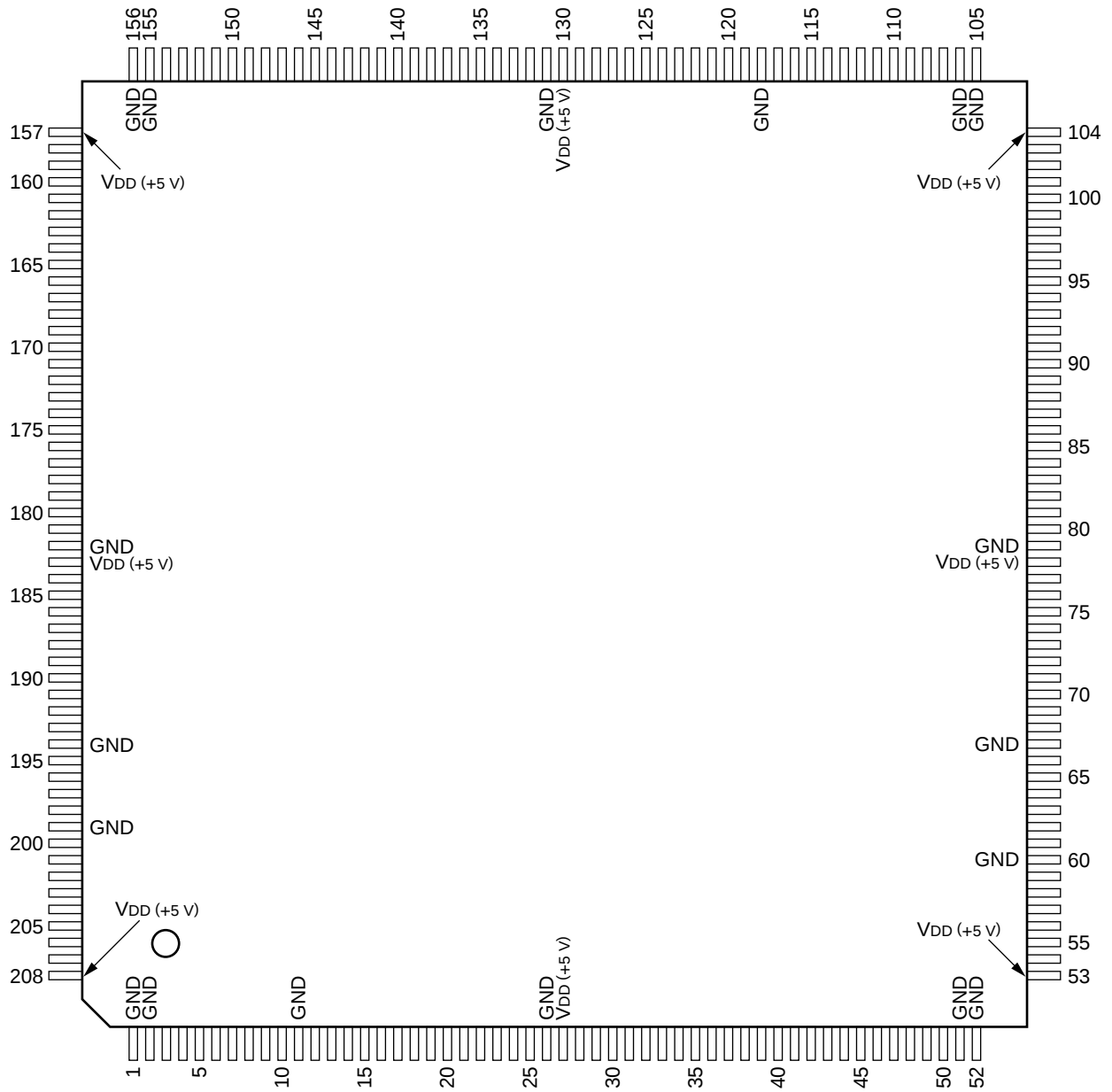


C-MOS KEY/DISPLAY CONTROL (GATE ARRAY)

—TOP VIEW—



INPUT

A16 - A19 : V50 A16 - A19
 ASTB : V50 ASTB
 BUFEN : V50 BUFEN
 BUFRW : V50 BUFRW
 CLK10 : 10 MHz CLOCK
 DIALA : ROTARY ENCODER PHASE A SIGNAL
 DIALB : ROTARY ENCODER PHASE B SIGNAL
 DPD0 - DPD15 : DUAL PORT RAM DATA
 IORD : V50 IORD
 IORD : V50 IOWR
 KRL0 - KRL7 : KEY RETURN LINE-0 TO LINE-7
 MWR : V50 MEMORY WRITE
 PI00 - PI07 : INPUT PORT-0
 PI10 - PI13 : INPUT PORT-1
 TEST : TEST TERMINAL
 UBE : V50 UPPER BYTE ENABLE
 XRESET : RESET SIGNAL

OUTPUT

AB0 - AB19 : ADDRESS BUS
 CLK06 : 625 kHz CLOCK
 CLK5 : 5 MHz CLOCK
 DPA0 - DPA10 : DUAL PORT RAM ADDRESS
 DPCE : DUAL PORT RAM CHIP ENABLE
 DPCS : 4XXXXH CS: DUAL PORT RAM LEFT SIDE
 DPWRH : 4XXXXH UPPER BYTE CS: DUAL PORT RAM LEFT SIDE
 (FOR UPPER BYTE WR)
 DPWRL : 4XXXXH LOWER BYTE CS: DUAL PORT RAM LEFT SIDE
 (FOR LOWER BYTE WR)
 EJCLK : EJIDERU SERIAL CLOCK
 EJDT0 : EJIDERU BLOCK-0 SERIAL DATA
 EJDT1 : EJIDERU BLOCK-1 SERIAL DATA
 EJFRM : EJIDERU FRAME
 EJLP : EJIDERU LATCH PULSE
 I2XXX : CHIP SELECT (2XXXXH): RESERVED
 I3XXX : CHIP SELECT (3XXXXH): RESERVED
 I4XXX : CHIP SELECT (4XXXXH): RESERVED
 I5XXX : CHIP SELECT (5XXXXH): RESERVED
 I6XXX : CHIP SELECT (6XXXXH): RESERVED
 I7XXX : CHIP SELECT (7XXXXH): RESERVED
 KEYINT : KEY INTERRUPT SIGNAL
 KSL0 - KSL2 : KEY SCAN LINE-0 TO LINE 2
 LDT00 - LDT27 : LED DATA
 LSL0 - LSL3 : LED SCAN LINE-0 TO LINE 3
 M5XXXX : CHIP SELECT (5XXXXH): RESERVED
 PO00 - PO07 : OUTPUT PORT-0
 PO10 - PO13 : OUTPUT PORT-1
 RAMHCS : CHIP SELECT OF RAM (UPPER BYTE: 00000H - 3FFFFH)
 RAMLCS : CHIP SELECT OF RAM (LOWER BYTE: 00000H - 3FFFFH)
 RES1 : RESET SIGNAL-1
 ROMCS : ROM CHIP SELECT (80000H - FFFFFH)
 XRES0 : RESET SIGNAL-0

INPUT/OUTPUT

AD0 - AD15 : V50 AD0 - AD15
 DB0 - DB15 : DATA BUS

(V_{DD} = +5 V)

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	—	GND	53	—	V _{DD}	105	—	GND	157	—	V _{DD}
2	—	GND	54	O	AB0	106	—	GND	158	I	KRL1
3	O	LDT24	55	O	AB1	107	I/O	AD0	159	I	KRL2
4	O	LDT25	56	O	AB2	108	I/O	AD1	160	I	KRL3
5	O	LDT26	57	O	AB3	109	I/O	AD2	161	I	KRL4
6	O	LDT27	58	O	AB4	110	I/O	AD3	162	I	KRL5
7	O	DPCS	59	O	AB5	111	I/O	AD4	163	I	KRL6
8	O	DPWRL	60	—	GND	112	I/O	AD5	164	I	KRL7
9	O	DPWRH	61	O	AB6	113	I/O	AD6	165	O	KSL0
10	O	DPCE	62	O	AB7	114	I/O	AD7	166	O	KSL1
11	—	GND	63	O	AB8	115	I/O	AD8	167	O	KSL2
12	O	DPA0	64	O	AB9	116	I/O	AD9	168	O	P000
13	O	DPA1	65	O	AB10	117	I/O	AD10	169	O	P001
14	O	DPA2	66	O	AB11	118	—	GND	170	O	P002
15	O	DPA3	67	—	GND	119	I/O	AD11	171	O	P003
16	O	DPA4	68	O	AB12	120	I/O	AD12	172	O	P004
17	O	DPA5	69	O	AB13	121	I/O	AD13	173	O	P005
18	O	DPA6	70	O	AB14	122	I/O	AD14	174	O	P006
19	O	DPA7	71	O	AB15	123	I/O	AD15	175	O	P007
20	O	DPA8	72	O	AB16	124	I	A16	176	O	P010
21	O	DPA9	73	O	AB17	125	I	A17	177	O	P011
22	O	DPA10	74	O	AB18	126	I	A18	178	O	P012
23	I	DPD0	75	O	AB19	127	I	A19	179	O	P013
24	I	DPD1	76	I/O	DB0	128	I	IORD	180	O	LSL0
25	I	DPD2	77	I/O	DB1	129	I	IOWR	181	O	LSL1
26	—	GND	78	—	V _{DD}	130	—	V _{DD}	182	—	GND
27	—	V _{DD}	79	—	GND	131	—	GND	183	—	V _{DD}
28	I	DPD3	80	I/O	DB2	132	I	CLK10	184	O	LSL2
29	I	DPD4	81	I/O	DB3	133	I	MWR	185	O	LSL3
30	I	DPD5	82	I/O	DB4	134	I	BUFRW	186	O	LDT00
31	I	DPD6	83	I/O	DB5	135	I	BUFEN	187	O	LDT01
32	I	DPD7	84	I/O	DB6	136	I	UBE	188	O	LDT02
33	I	DPD8	85	I/O	DB7	137	I	ASTB	189	O	LDT03
34	I	DPD9	86	I/O	DB8	138	I	XRESET	190	O	LDT04
35	I	DPD10	87	I/O	DB9	139	O	XRES0	191	O	LDT05
36	I	DPD11	88	I/O	DB10	140	O	RES1	192	O	LDT06
37	I	DPD12	89	I/O	DB11	141	O	KEYINT	193	O	LDT07
38	I	DPD13	90	I/O	DB12	142	I	PI00	194	—	GND
39	I	DPD14	91	I/O	DB13	143	I	PI01	195	O	LDT10
40	I	DPD15	92	I/O	DB14	144	I	PI02	196	O	LDT11
41	I	DIALA	93	I/O	DB15	145	I	PI03	197	O	LDT12
42	I	DIALB	94	O	ROMCS	146	I	PI04	198	O	LDT13
43	I	TEST	95	O	RAMLCS	147	I	PI05	199	—	GND
44	O	EJFRM	96	O	RAMHCS	148	I	PI06	200	O	LDT14
45	O	EJLP	97	O	M5XXXX	149	I	PI07	201	O	LDT15
46	O	EJDT0	98	O	I2XXX	150	I	PI10	202	O	LDT16
47	O	EJDT1	99	O	I3XXX	151	I	PI11	203	O	LDT17
48	O	EJCLK	100	O	I4XXX	152	I	PI12	204	O	LDT20
49	O	CLK06	101	O	I5XXX	153	I	PI13	205	O	LDT21
50	O	CLK5	102	O	I6XXX	154	I	KRL0	206	O	LDT22
51	—	GND	103	O	I7XXX	155	—	GND	207	O	LDT23
52	—	GND	104	—	V _{DD}	156	—	GND	208	—	V _{DD}