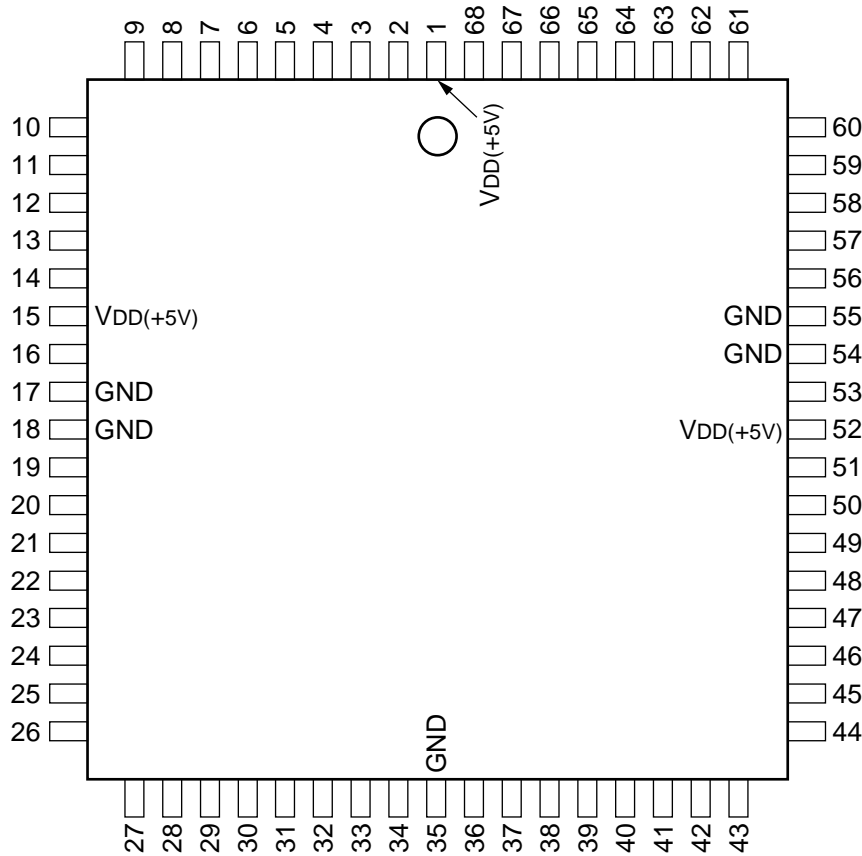


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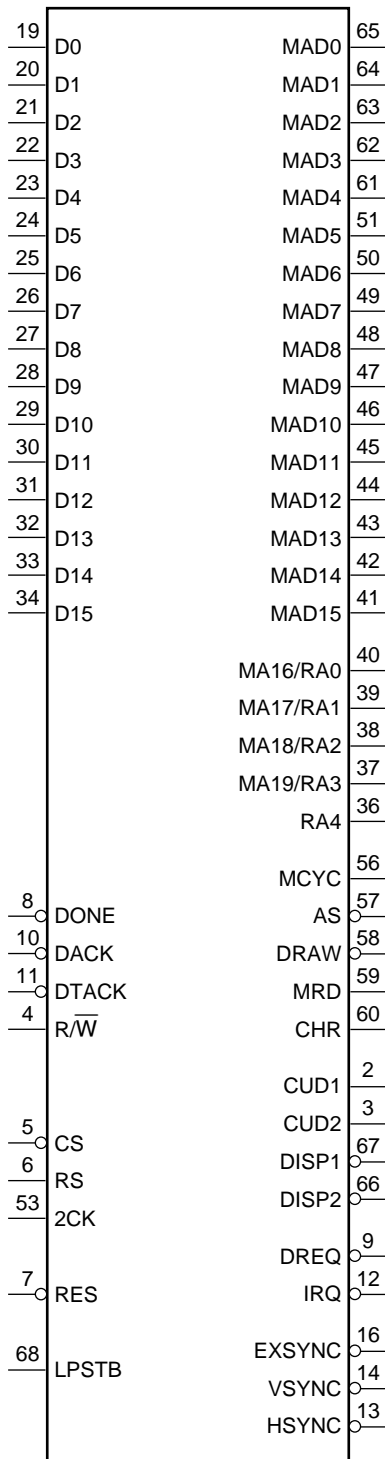
### C-MOS ADVANCED CRT CONTROLLER

—TOP VIEW—



(VDD = +5V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	—	VDD	18	—	GND	35	—	GND	52	—	VDD
2	O	CUD1	19	I/O	D0	36	O	RA4	53	I	2CK
3	O	CUD2	20	I/O	D1	37	O	MA19/RA3	54	—	GND
4	I	R $\bar{W}$	21	I/O	D2	38	O	MA18/RA2	55	—	GND
5	I	CS	22	I/O	D3	39	O	MA17/RA1	56	O	MCYC
6	I	RS	23	I/O	D4	40	O	MA16/RA0	57	O	AS
7	I	RES	24	I/O	D5	41	I/O	MAD15	58	O	DRAW
8	I/O	DONE	25	I/O	D6	42	I/O	MAD14	59	O	MRD
9	O	DREQ	26	I/O	D7	43	I/O	MAD13	60	O	CHR
10	I	DACK	27	I/O	D8	44	I/O	MAD12	61	I/O	MAD4
11	I	DTACK	28	I/O	D9	45	I/O	MAD11	62	I/O	MAD3
12	O	IRQ	29	I/O	D10	46	I/O	MAD10	63	I/O	MAD2
13	O	HSYNC	30	I/O	D11	47	I/O	MAD9	64	I/O	MAD1
14	O	VSYNC	31	I/O	D12	48	I/O	MAD8	65	I/O	MAD0
15	—	VDD	32	I/O	D13	49	I/O	MAD7	66	O	DISP2
16	I/O	EXSYNC	33	I/O	D14	50	I/O	MAD6	67	O	DISP1
17	—	GND	34	I/O	D15	51	I/O	MAD5	68	I	LPSTB



**INPUT**

- 2CK ; 2CLOCK
- CS ; CHIP SELECT
- DACK ; DMA ACKNOWLEDGE
- DTACK ; DATA TRANSFER ACKNOWLEDGE
- LPSTB ; LIGHT PEN STROBE
- R/W ; READ/WRITE
- RWS ; RESET
- RS ; REGISTER SELECT

**OUTPUT**

- AS ; ADDRESS STROBE
- CHR ; CHARACTER
- CUD1, CUD2 ; CURSOR DISPLAY
- DISP1, DISP2 ; DISPLAY TIMING
- DRAW ; DRAW
- DREQ ; DMA REQUEST
- HSYNC ; HORIZONTAL SYNC
- IRQ ; INTERRUPT REQUEST
- MA16 - MA19 ; MEMORY ADDRESS
- MCYC ; MEMORY CYCLE
- MRD ; MEMORY READ
- RA0 - RA4 ; RASTER ADDRESS
- VSYNC ; VERTICAL SYNC

**INPUT/OUTPUT**

- D0 - D15 ; DATA BUS
- DONE ; DONE
- EXSYNC ; EXTERNAL SYNC
- MAD0 - MAD15 ; MEMORY ADDRESS/DATA

