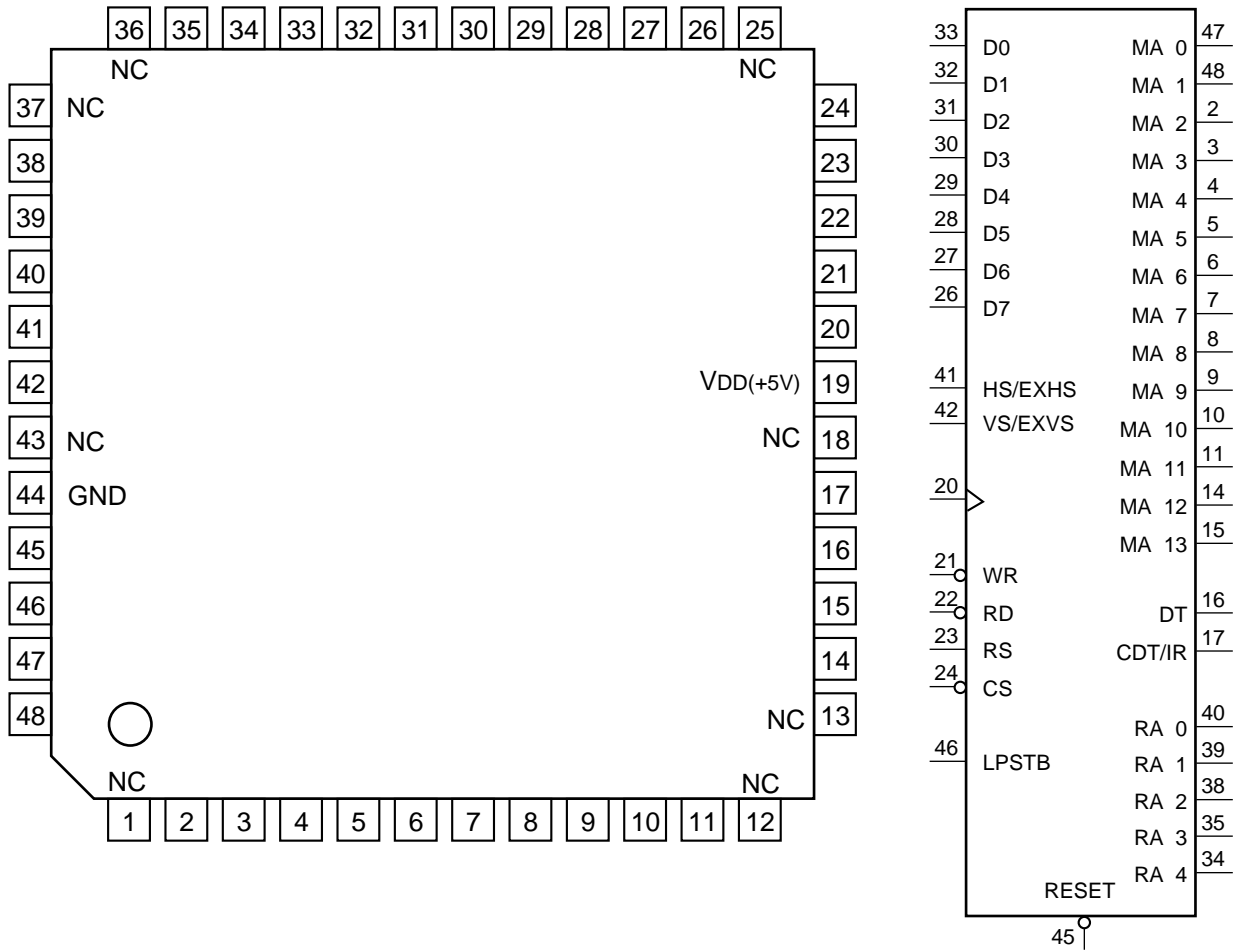
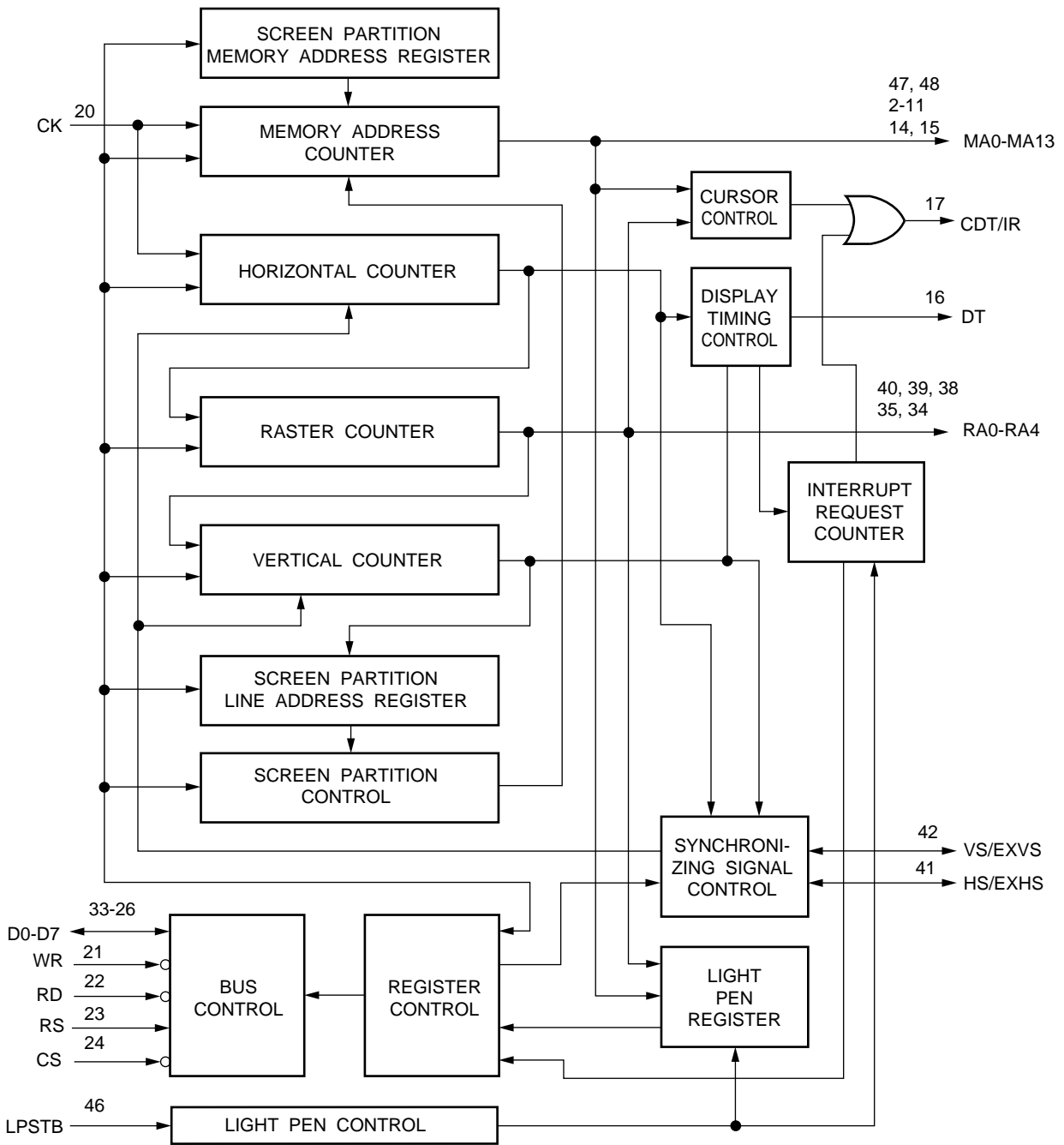

MB89322A (1/2)
IL00

C-MOS PROGRAMMABLE CRT (CATHODE-RAY TUBE) CONTROLLER
—TOP VIEW—



| PIN No. | I/O | SIGNAL | PIN No. | I/O | SIGNAL | PIN No. | I/O | SIGNAL | PIN No. | I/O | SIGNAL |
|---------|-----|--------|---------|-----|-----------|---------|-----|--------|---------|-----|---------|
| 1 | — | NC | 13 | — | NC | 25 | — | NC | 37 | — | NC |
| 2 | O | MA2 | 14 | O | MA12 | 26 | I/O | D7 | 38 | O | RA2 |
| 3 | O | MA3 | 15 | O | MA13 | 27 | I/O | D6 | 39 | O | RA1 |
| 4 | O | MA4 | 16 | O | DT | 28 | I/O | D5 | 40 | O | RA0 |
| 5 | O | MA5 | 17 | O | CDT/IR | 29 | I/O | D4 | 41 | I/O | HS/EXHS |
| 6 | O | MA6 | 18 | — | NC | 30 | I/O | D3 | 42 | I/O | VS/EXVS |
| 7 | O | MA7 | 19 | — | VDD (+5V) | 31 | I/O | D2 | 43 | — | NC |
| 8 | O | MA8 | 20 | I | CK | 32 | I/O | D1 | 44 | — | GND |
| 9 | O | MA9 | 21 | I | WR | 33 | I/O | D0 | 45 | I | RESET |
| 10 | O | MA10 | 22 | I | RD | 34 | O | RA4 | 46 | I | LPSTB |
| 11 | O | MA11 | 23 | I | RS | 35 | O | RA3 | 47 | O | MA0 |
| 12 | — | NC | 24 | I | CS | 36 | — | NC | 48 | O | MA1 |



INPUT

CK ; CLOCK
 CS ; CHIP SELECT
 LPSTB ; LIGHT PEN STROBE
 RD ; READ
 RESET ; RESET INPUT
 RS ; REGISTER SELECT
 WR ; WRITE

OUTPUT

CDT/IR ; CURSOR DISPLAY TIMING/
 INTERRUPT REQUEST
 DT ; DISPLAY TIMING
 MA0-MA13 ; MEMORY ADDRESS
 RA0-RA4 ; RASTER ADDRESS

INPUT/OUTPUT

D0-D7 ; DATA BUS
 HS/EXHS ; H SYNC OUT/EXTERNAL H SYNC IN
 VS/EXVS ; V SYNC OUT/EXTERNAL V SYNC IN