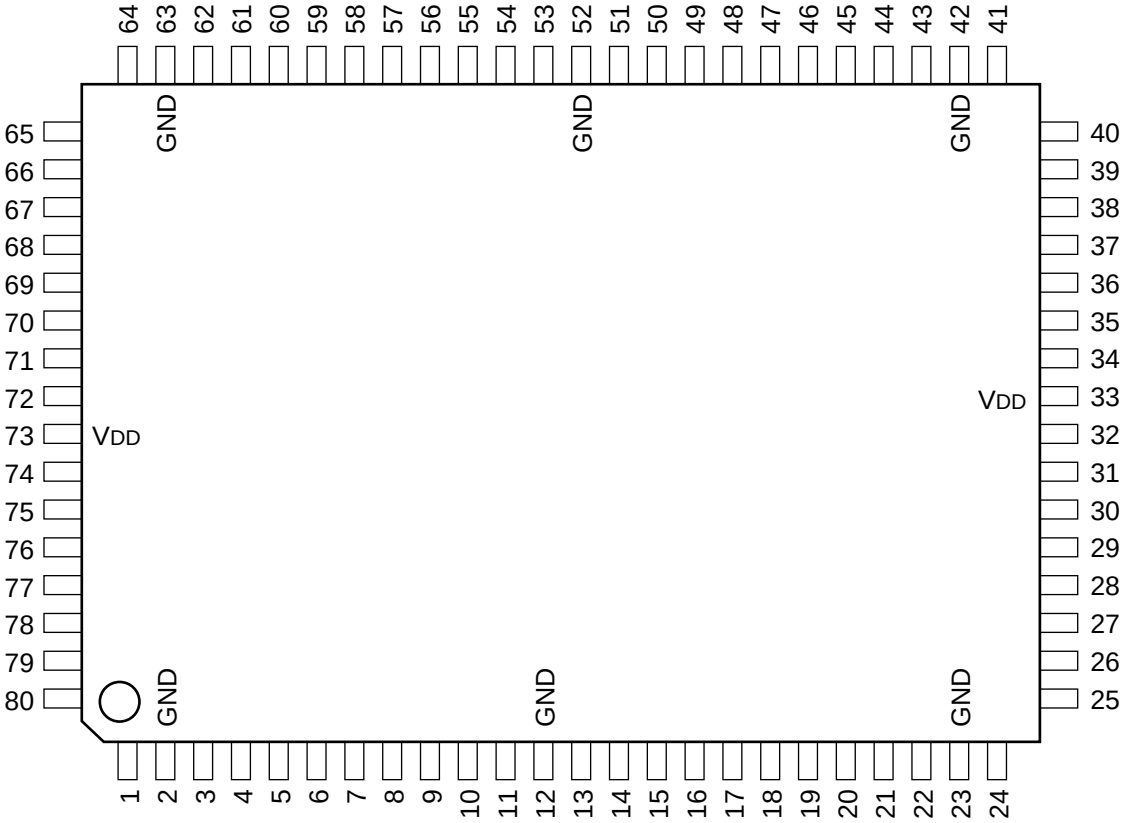
C-MOS SERIAL CONTROLLER

—TOP VIEW—



<CPU MODE>

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	—	NC	21	I/O	D14	41	—	NC	61	—	NC
2	—	GND	22	O	CKDO1	42	—	GND	62	—	NC
3	O	CKDO2	23	I	GND	43	—	NC	63	—	GND
4	I/O	D0	24	I/O	D15	44	—	NC	64	I	CKD
5	I/O	D1	25	I	AO	45	—	NC	65	—	NC
6	I/O	D2	26	I	RD	46	—	NC	66	—	NC
7	I/O	D3	27	I	WR	47	—	NC	67	—	NC
8	I/O	D4	28	I	CS	48	—	NC	68	—	NC
9	I/O	D5	29	O	WF	49	—	NC	69	—	NC
10	I/O	D6	30	O	WW	50	—	NC	70	—	NC
11	O	ADR	31	O	RW	51	I	RST	71	—	NC
12	—	GND	32	O	RB	52	—	GND	72	—	NC
13	—	NC	33	—	VDD	53	—	NC	73	—	VDD
14	I/O	D7	34	O	RF	54	I	DIN	74	—	NC
15	I/O	D8	35	O	ER	55	—	NC	75	—	NC
16	I/O	D9	36	—	NC	56	O	DO	76	—	NC
17	I/O	D10	37	—	NC	57	—	NC	77	—	NC
18	I/O	D11	38	—	NC	58	I	MODE	78	—	NC
19	I/O	D12	39	—	NC	59	—	NC	79	—	NC
20	I/O	D13	40	—	NC	60	—	NC	80	—	NC

<CPU MODE>

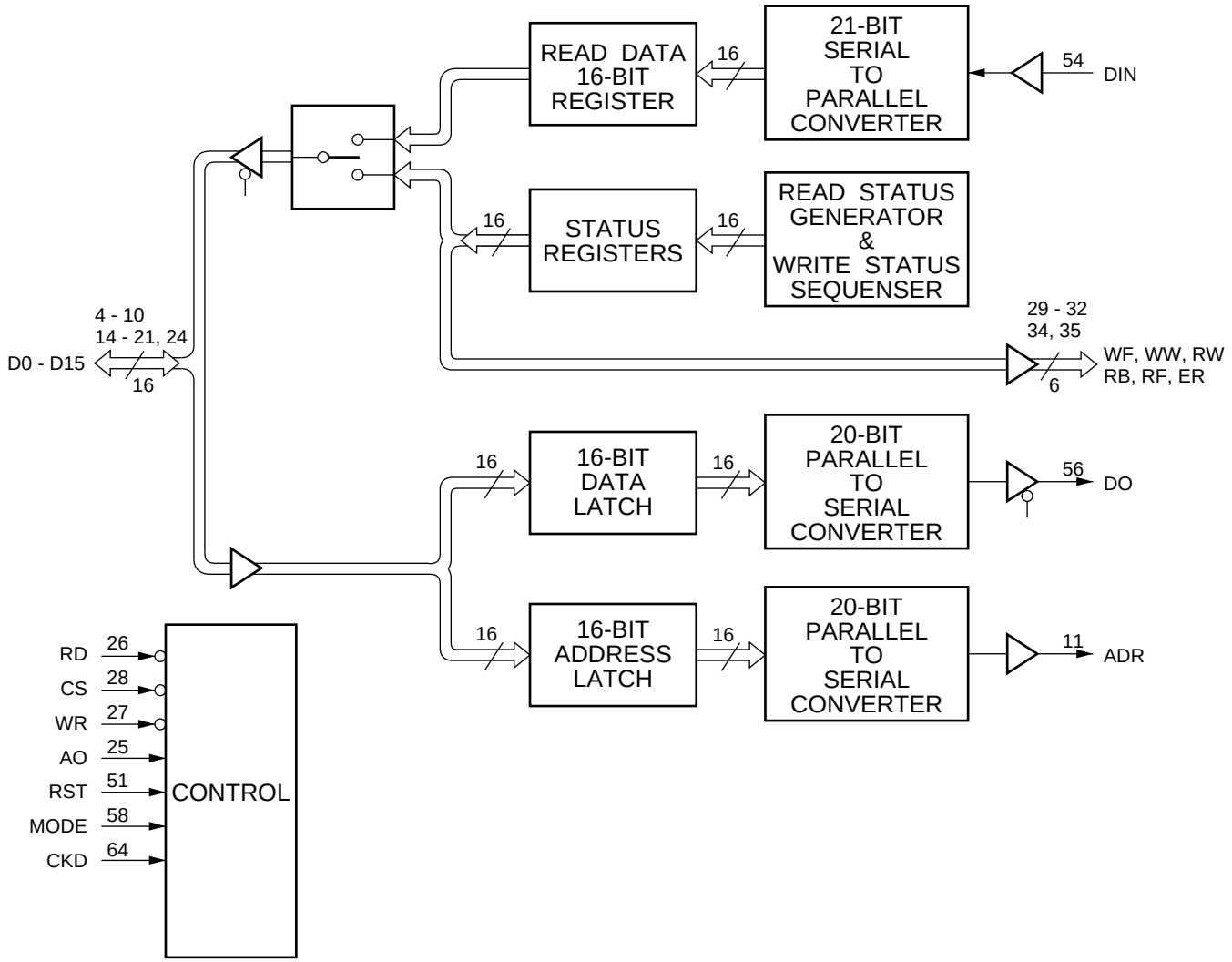
INPUT

AO ; REGISTER SELECT
LOW : DATA REGISTER ACTIVE
HIGH : ADDRESS REGISTER ACTIVE
CKD ; SERIAL INTERFACE CLOCK
CS ; CHIP SELECT (LOW : ACTIVE)
DIN ; SERIAL DATA
MODE ; CPU/VIDEO BOARD MODE SELECT
LOW : CPU MODE
RD ; READ ENABLE (LOW : ACTIVE)
RST ; RESET PULSE
WR ; WRITE ENABLE (LOW : ACTIVE)

OUTPUT

ADR ; SERIAL ADDRESS
CKDO1,
CKDO2 ; SERIAL INTERFACE CLOCK
DO ; SERIAL DATA
ER ; READ ERROR (HIGH : ERROR)
RB ; READ BUSY (HIGH : BUSY)
RF ; READ BUFFER FULL OUT
HIGH : READ REGISTERS ARE FULL
LOW : READ REGISTERS ARE EMPTY
RW ; READ WINDOW
HIGH : READ DATA ARE RECEIVING AT DIN TERMINAL
WF HIGH : WRITE REGISTERS ARE FULL
LOW : WRITE REGISTERS ARE EMPTY
WW ; WRITE WINDOW
HIGH : SERIAL DATA OR ADDRESS ARE SENDING FROM D OUT OR ADR (SERIAL ADDRESS) TERMINALS

<CPU MODE>



<VIDEO BOARD MODE>

PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL
1	O	Y28	21	I/O	Y19	41	O	Y04	61	O	ROMCK
2	—	GND	22	O	CKDO1	42	—	GND	62	O	ROMCS
3	O	CKDO2	23	—	GND	43	O	THMO	63	—	GND
4	I/O	Y27	24	I/O	Y18	44	O	CS	64	I	CKDI
5	I/O	Y26	25	I/O	Y17	45	O	CSXP	65	O	Y3B/RCS
6	I/O	Y25	26	I/O	Y16	46	I	CA4	66	O	Y3A/WCS
7	I/O	Y24	27	I/O	Y15	47	I	CA3	67	O	Y39/IA5
8	I/O	Y23	28	I/O	Y14	48	I	CA2	68	O	Y38/IA4
9	I/O	Y22	29	O	Y0F	49	I	CA1	69	O	Y37/IA3
10	I/O	Y21	30	O	Y0E	50	I	CA0	70	O	Y36/IA2
11	O	ADRO	31	O	Y0D	51	I	RST	71	O	Y35/IA1
12	—	GND	32	O	Y0C	52	—	GND	72	O	Y34/IA0
13	I/O	DIO	33	—	V_{DD}	53	I	ADRI	73	—	V_{DD}
14	I/O	Y20	34	O	Y0B	54	I	DIN	74	O	Y33
15	I/O	Y1F	35	O	Y0A	55	O	OEH	75	O	Y32
16	I/O	Y1E	36	O	Y09	56	O	DO	76	O	Y31
17	I/O	Y1D	37	O	Y08	57	O	GENO	77	O	Y30
18	I/O	Y1C	38	O	Y07	58	I	MODE	78	O	Y2B
19	I/O	Y1B	39	O	Y06	59	I	ROMI	79	O	Y2A
20	I/O	Y1A	40	O	Y05	60	O	ROMO	80	O	Y29

<VIDEO MODE>

INPUT

ADRI	; SERIAL ADDRESS
CA0-CA4	; CARD ADDRESS (5-BIT)
CKDI	; SERIAL INTERFACE CLOCK
DIN	; SERIAL DATA
MODE	; CPU/VIDEO BOARD MODE SELECT H : VIDEO MODE
ROMI	; READ DATA IN FOR EEPROM
RST	; RESET PULSE (L : RESET)

OUTPUT

ADRO	; SERIAL ADDRESS
CKDO1, CKDO2	; SERIAL INTERFACE CLOCK
CSXP	; CHIP SELECT OUT FOR 20-BIT CROSS POINT ICS
DO	; SERIAL DATA
GENO	; UNIVERSAL CONTROL
OEH	; ENABLE OUT FOR DRIVER
ROM CK	; CLOCK OUT FOR EEPROM
ROM CS	; CHIP SELECT OUT FOR EEPROM
ROMD	; WRITE DATA OUT FOR EEPROM
THMO	; THERMISTOR CONTROL
Y04 - Y3B	; IC ADDRESS DECODER

INPUT/OUTPUT

DIO	; SERIAL DATA

<VIDEO MODE>