

NCR65C02

■ ABSOLUTE MAXIMUM RATINGS:

($V_{DD} = 5.0 \text{ V} \pm 5\%$, $V_{SS} = 0 \text{ V}$, $T_A = 0^\circ \text{ to } +70^\circ \text{C}$)

RATING	SYMBOL	VALUE	UNIT
SUPPLY VOLTAGE	V_{DD}	-0.3 to +7.0	V
INPUT VOLTAGE	V_{IN}	-0.3 to +7.0	V
OPERATING TEMP.	T_A	0 to +70	°C
STORAGE TEMP.	T_{STG}	-55 to +150	°C

■ PIN FUNCTION

PIN	FUNCTION
A0 - A15	Address Bus
D0 - D7	Data Bus
\overline{IRQ}^*	Interrupt Request
RDY [*]	Ready
ML	Memory Lock
\overline{NMI}^*	Non-Maskable Interrupt
SYNC	Synchronize
\overline{RES}^*	Reset
\overline{SO}^*	Set Overflow
NC	No Connection
R/W	Read/Write
VDD	Power Supply (+5V)
VSS	Internal Logic Ground
ϕ_0	Clock Input
ϕ_1, ϕ_2	Clock Output

*This pin has an optional internal pullup for a No Connect condition.

■ DC CHARACTERISTICS

	SYMBOL	MIN.	TYP.	MAX.	UNIT
Input High Voltage ϕ_0 (IN)	V_{IH}	$V_{SS} + 2.4$	—	V_{DD}	V
Input High Voltage RES, \overline{NMI} , RDY, \overline{IRQ} , Data, S.O.		$V_{SS} + 2.0$	—	—	V
Input Low Voltage ϕ_0 (IN)	V_{IL}	$V_{SS} - 0.3$	—	$V_{SS} + 0.4$	V
RES, \overline{NMI} , RDY, \overline{IRQ} , Data, S.O.		—	—	$V_{SS} + 0.8$	V
Input Leakage Current ($V_{IN} = 0$ to 5.25V, $V_{DD} = 5.25\text{V}$)	I_{IN}				μA
With pullups		-30	—	+30	μA
Without pullups		—	—	+1.0	μA
Three State (Off State) Input Current ($V_{IN} = 0.4$ to 2.4V, $V_{CC} = 5.25\text{V}$) Data Lines	I_{TSI}	—	—	10	μA
Output High Voltage ($I_{OH} = -100 \mu\text{A}$, $V_{DD} = 4.75\text{V}$ SYNC, Data, A0-A15, R/W)	V_{OH}	$V_{SS} + 2.4$	—	—	V
Out Low Voltage ($I_{OL} = 1.6\text{mA}$, $V_{DD} = 4.75\text{V}$ SYNC, Data, A0-A15, R/W)	V_{OL}	—	—	$V_{SS} + 0.4$	V
Supply Current $f = 1\text{MHz}$	I_{DD}	—	—	4	mA
Supply Current $f = 2\text{MHz}$	I_{DD}	—	—	8	mA
Capacitance ($V_{IN} = 0$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)	C				pF
Logic	C_{IN}	—	—	5	
Data		—	—	10	
A0-A15, R/W, SYNC	C_{out}	—	—	10	
ϕ_0 (IN)	C_{ϕ_0} (IN)	—	—	10	