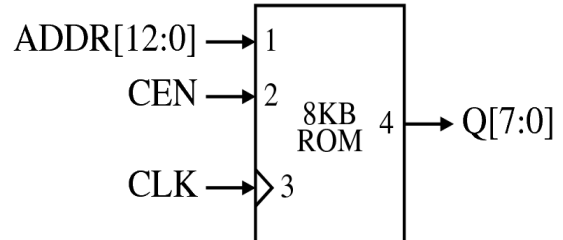


VROM 8KByte, LOW POWER, LOW VOLTAGE – SS0511

PRODUCT CODE(S): SS0511

KEY FEATURES

- 8Kbyte size
- Very low voltage: 1 - 1.95V DC supply
- Temperature range: -40°C up to 70°C
- CMOS SMIC 180nm technology


SHORT DESCRIPTION

The VROM has clock (CLK), chip enable (CEN), address (ADDR) and data out (Q) pins.

The ADDR and CEN signals are triggered on the rising-edge of the CLK. When CEN is high, the cell is forced in stand-by mode and data output is kept to the previous value.

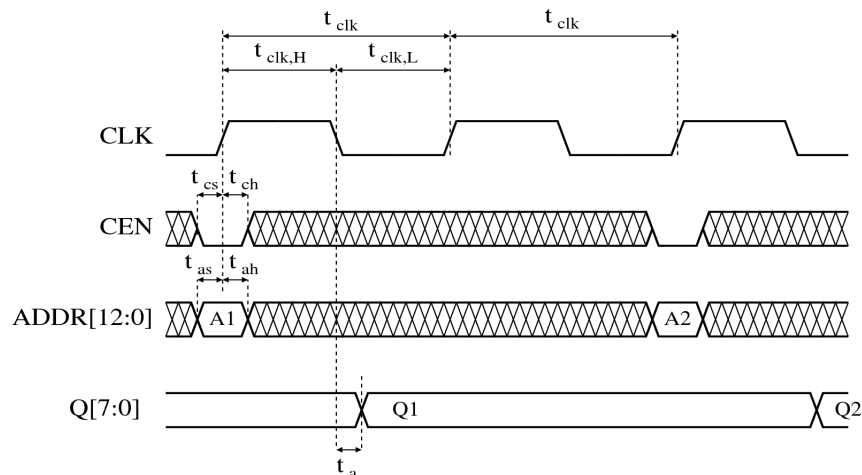
When CEN is low, the output signals change their values on the following CLK falling-edge.

PHYSICAL DIMENSIONS

Area type	Width (um)	Height (um)	Area (mm ²)
Cell	501.17	672.77	0.34

PINLIST

#	Name	Description	Notes
1	ADDR[12:0]	Address (ADDR[0] is LSB)	
2	CEN	Chip enable	
3	CLK	Clock	
4	Q[7:0]	Data outputs (Q[0] is LSB)	

READ CYCLE TIMING


TIMING

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Clock period	t_{clk}		0.1	1	-	us
Clock frequency	f_{clk}		-	1	10	MHz
Access time ¹	t_a	With Q outputs connected to INVX2.	400	550	2000	ps
Address setup	t_{as}		160	200	1000	ps
Address hold	t_{ah}		160	100	1000	ps
Chip enable setup	t_{cs}		160	200	1000	ps
Chip enable hold	t_{ch}		160	100	1000	ps
Clock high	$t_{ck,H}$		20	50	80	%
Clock low	$t_{ck,L}$		20	50	80	%
Clock rise time	$t_{ck,R}$		500	590	1320	ps
Clock fall time	$t_{ck,F}$		370	410	615	ps

¹ For any load: $t_a = t_{a,INVX2} + \Delta t$; $\Delta t = K_{BUF} * (C_L - C_{L,INVX2}) = 1.4 * (C_L - 0.0055)$ [ps].

POWER (units = uA)

Parameter	Conditions	Min	Typ	Max
Read mode current	With supply voltage of 1V.	0.01	0.4	2.4
	With supply voltage of 1.8V.	0.01	0.5	3.1

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