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| Component AT28BV256

[Component] AT28BV256

[Manufacturer] Atmel Inc.

[Package]

variable	typ	min	max
R_pkg	69.10m	48.40m	89.80m
L_pkg	4.30nH	3.00nH	5.60nH
C_pkg	1.00pF	0.70pF	1.30pF

[Pin] signal_name model_name R_pin L_pin C_pin

1	OE/	input			
2	A11	input			
3	A9	input			
4	A8	input			
5	A13	input			
6	WE/	input			
7	VCC	POWER			
8	A14	input			
9	A12	input			
10	A7	input			
11	A6	input			
12	A5	input			
13	A4	input			
14	A3	input			
15	A2	input			
16	A1	input			
17	A0	input			
18	I/O0	tristate_driver			
19	I/O1	tristate_driver			
20	I/O2	tristate_driver			
21	GND	GND			
22	I/O3	tristate_driver			
23	I/O4	tristate_driver			
24	I/O5	tristate_driver			
25	I/O6	tristate_driver			
26	I/O7	tristate_driver			
27	CE/	input			
28	A10	input			

Model tristate_driver

[Model] tristate_driver
Model_type 3-state
Polarity Inverting
Enable Active-Low
Vmeas = 1.50V
Vref = 1.50V
C_comp 0.000F 0.000F 0.000F

[Temperature Range] 25.00 85.00 10.00
[Voltage Range] 2.60V 2.40V 3.00V

[Pulldown]			
voltage	I(typ)	I(min)	I(max)
-3.00	-50mA	-20mA	-90mA
-0.60	-13.83mA	-10.26mA	-17.08mA
-0.50	-11.46mA	-8.49mA	-14.21mA
-0.40	-9.11mA	-6.73mA	-11.35mA
-0.30	-6.78mA	-4.99mA	-8.48mA
-0.20	-4.48mA	-3.28mA	-5.63mA
-0.10	-2.22mA	-1.62mA	-2.80mA
0.00	-0.43nA	-0.32nA	-0.31nA
0.10	2.09mA	1.52mA	2.67mA
0.20	4.00mA	2.90mA	5.13mA
0.30	5.72mA	4.15mA	7.39mA
0.40	7.28mA	5.28mA	9.45mA
0.50	8.67mA	6.28mA	11.32mA
0.60	9.90mA	7.17mA	13.01mA
0.70	10.98mA	7.95mA	14.53mA
0.80	11.91mA	8.61mA	15.89mA
0.90	12.70mA	9.17mA	17.08mA
1.00	13.36mA	9.63mA	18.13mA
1.10	13.89mA	9.98mA	19.02mA
1.20	14.29mA	10.24mA	19.78mA
1.30	14.57mA	10.40mA	20.40mA
1.40	14.74mA	10.47mA	20.89mA
1.50	14.79mA	10.48mA	21.26mA
1.60	14.81mA	10.49mA	21.50mA
1.70	14.83mA	10.50mA	21.63mA
1.80	14.85mA	10.51mA	21.66mA
1.90	14.87mA	10.52mA	21.70mA
2.00	14.89mA	10.53mA	21.74mA
2.10	14.92mA	10.53mA	21.77mA
2.20	14.94mA	10.54mA	21.81mA
2.30	14.96mA	10.55mA	21.84mA
2.40	14.98mA	10.56mA	21.88mA
2.50	15.00mA	10.57mA	21.92mA
2.60	15.02mA	10.58mA	21.95mA
2.70	15.04mA	10.59mA	21.99mA
2.80	15.06mA	10.60mA	22.03mA
2.90	15.08mA	10.61mA	22.06mA

3.00	15.10mA	10.62mA	22.10mA
3.10	15.12mA	10.63mA	22.14mA
3.20	15.14mA	10.67mA	22.17mA
3.30	15.16mA	10.76mA	22.21mA
3.40	15.23mA	10.89mA	22.25mA
3.50	15.25mA	10.91mA	22.27mA
3.60	15.27mA	10.93mA	22.29mA
6.0	150mA	150mA	220mA

[Pullup]

voltage	I(typ)	I(min)	I(max)
-3.0	20mA	10mA	40mA
-0.90	10.55mA	4.41mA	20.94mA
-0.80	10.24mA	5.73mA	18.76mA
-0.70	8.97mA	5.16mA	16.43mA
-0.60	7.64mA	4.40mA	14.02mA
-0.50	6.30mA	3.63mA	11.61mA
-0.40	4.99mA	2.86mA	9.23mA
-0.30	3.70mA	2.12mA	6.87mA
-0.20	2.43mA	1.39mA	4.55mA
-0.10	1.20mA	0.68mA	2.25mA
0.00	0.60nA	0.25nA	1.48nA
0.10	-1.15mA	-0.65mA	-2.19mA
0.20	-2.24mA	-1.25mA	-4.29mA
0.30	-3.27mA	-1.82mA	-6.30mA
0.40	-4.24mA	-2.34mA	-8.22mA
0.50	-5.14mA	-2.83mA	-10.05mA
0.60	-5.99mA	-3.28mA	-11.79mA
0.70	-6.78mA	-3.69mA	-13.45mA
0.80	-7.51mA	-4.06mA	-15.01mA
0.90	-8.18mA	-4.38mA	-16.49mA
1.00	-8.79mA	-4.68mA	-17.88mA
1.10	-9.34mA	-4.93mA	-19.18mA
1.20	-9.84mA	-5.14mA	-20.39mA
1.30	-10.27mA	-5.31mA	-21.51mA
1.40	-10.65mA	-5.45mA	-22.55mA
1.50	-10.96mA	-5.54mA	-23.50mA
1.60	-11.22mA	-5.60mA	-24.36mA
1.70	-11.42mA	-5.62mA	-25.13mA
1.80	-11.56mA	-5.62mA	-25.82mA
1.90	-11.65mA	-5.62mA	-26.42mA
2.00	-11.67mA	-5.63mA	-26.93mA
2.10	-11.68mA	-5.63mA	-27.36mA
2.20	-11.69mA	-5.63mA	-27.70mA
2.30	-11.69mA	-5.64mA	-27.96mA
2.40	-11.70mA	-5.64mA	-28.13mA
2.50	-11.71mA	-5.64mA	-28.21mA
2.60	-11.71mA	-5.64mA	-28.23mA
2.70	-11.72mA	-5.65mA	-28.25mA
2.80	-11.73mA	-5.65mA	-28.27mA
2.90	-11.74mA	-5.65mA	-28.29mA
3.00	-11.74mA	-5.65mA	-28.31mA
3.10	-11.75mA	-5.66mA	-28.33mA
3.20	-11.76mA	-5.66mA	-28.35mA
3.30	-11.76mA	-5.68mA	-28.38mA

3.40	-11.77mA	-5.78mA	-28.40mA
6.0	-100mA	-100mA	-100mA

[GND_clamp]

voltage	I(typ)	I(min)	I(max)
-3.0	-100mA	-100mA	-100mA
0.00	-5.20pA	-0.35nA	-6.00pA
0.10	-3.38pA	-0.24nA	-5.23pA
0.20	-2.98pA	-0.23nA	-4.83pA
0.30	-2.58pA	-0.23nA	-4.43pA
0.40	-2.17pA	-0.23nA	-4.03pA
0.50	-1.77pA	-0.22nA	-3.63pA
0.60	-1.37pA	-0.22nA	-3.23pA
0.70	-0.97pA	-0.22nA	-2.83pA
0.80	-0.56pA	-0.21nA	-2.43pA
0.90	-0.16pA	-0.21nA	-2.03pA
1.00	0.24pA	-0.21nA	-1.62pA
1.10	0.64pA	-0.20nA	-1.22pA
1.20	1.05pA	-0.20nA	-0.82pA
1.30	1.45pA	-0.20nA	-0.42pA
1.40	1.85pA	-0.19nA	-0.38pA
1.50	2.25pA	-0.19nA	0.38pA
1.60	2.66pA	-0.19nA	0.78pA
1.70	3.06pA	-0.18nA	1.18pA
1.80	3.46pA	-0.18nA	1.58pA
1.90	3.86pA	-0.18nA	1.98pA
2.00	4.27pA	-0.18nA	2.38pA
2.10	4.67pA	-0.17nA	2.78pA
2.20	5.07pA	-0.17nA	3.18pA
2.30	5.48pA	-0.17nA	3.59pA
2.40	5.88pA	-0.16nA	3.99pA
2.50	6.28pA	-0.16nA	4.39pA
2.60	6.69pA	-0.16nA	4.79pA

[POWER_clamp]

voltage	I(typ)	I(min)	I(max)
-3.00	25mA	20mA	30mA
-0.80	44.67uA	38.86uA	19.69uA
-0.70	1.42uA	3.91uA	0.60uA
-0.60	73.73nA	0.45uA	28.25nA
-0.50	4.70nA	45.27nA	1.58nA
-0.40	0.31nA	3.99nA	93.28pA
-0.30	25.20pA	0.12nA	11.80pA
-0.20	8.39pA	-0.16nA	7.38pA
-0.10	7.13pA	-0.16nA	6.80pA
0.00	6.69pA	-0.16nA	6.39pA

[Ramp]

variable	typ	min	max
dV/dt_r	0.18/2.77n	0.17/2.97n	0.28/0.89n
dV/dt_f	0.44/5.73n	0.33/7.22n	0.65/4.10n

R_load = 50.00

[Rising Waveform]

R_fixture = 1.30k
V_fixture = 0.000
V_fixture_min = 0.000
V_fixture_max = 0.000

time	V(typ)	V(min)	V(max)
0.000S	0.000V	0.000V	0.000V
0.80nS	-1.99mV	0.21mV	-16.22mV
1.60nS	-35.99mV	-2.80mV	24.41mV
2.40nS	18.54mV	-23.32mV	0.69V
3.20nS	0.21V	-48.61mV	1.28V
4.00nS	0.46V	-44.87mV	1.75V
4.80nS	0.70V	-13.31mV	2.23V
5.60nS	0.87V	48.79mV	2.53V
6.40nS	1.10V	0.15V	2.79V
7.20nS	1.33V	0.26V	3.06V
8.00nS	1.53V	0.37V	3.20V
8.80nS	1.72V	0.49V	3.30V
9.60nS	1.90V	0.60V	3.38V
10.40nS	2.05V	0.71V	3.41V
11.20nS	2.22V	0.84V	3.44V
12.00nS	2.32V	0.95V	3.46V
12.80nS	2.40V	1.03V	3.46V
13.60nS	2.48V	1.13V	3.47V
14.40nS	2.54V	1.22V	3.47V
15.20nS	2.60V	1.32V	3.47V
16.00nS	2.64V	1.41V	3.47V
16.80nS	2.68V	1.51V	3.48V
17.60nS	2.71V	1.61V	3.48V
18.40nS	2.73V	1.67V	3.48V
19.20nS	2.74V	1.72V	3.48V
20.00nS	2.76V	1.79V	3.48V
20.80nS	2.77V	1.85V	3.48V
21.60nS	2.78V	1.92V	3.48V
22.40nS	2.79V	1.98V	3.48V
23.20nS	2.79V	2.01V	3.48V
24.00nS	2.79V	2.05V	3.48V
24.80nS	2.80V	2.08V	3.48V
25.60nS	2.80V	2.12V	3.48V
26.40nS	2.80V	2.15V	3.48V
27.20nS	2.80V	2.18V	3.48V
28.00nS	2.80V	2.20V	3.48V
28.80nS	2.80V	2.22V	3.48V
29.60nS	2.80V	2.25V	3.48V
30.40nS	2.80V	2.27V	3.48V
31.20nS	2.81V	2.28V	3.48V
32.00nS	2.81V	2.29V	3.48V
32.80nS	2.81V	2.30V	3.48V
33.60nS	2.81V	2.31V	3.48V
34.40nS	2.81V	2.32V	3.48V
35.20nS	2.81V	2.33V	3.48V
36.00nS	2.81V	2.34V	3.48V
36.80nS	2.81V	2.35V	3.48V
37.60nS	2.81V	2.35V	3.48V
38.40nS	2.81V	2.36V	3.48V
39.20nS	2.81V	2.36V	3.48V

time	V(typ)	V(min)	V(max)
40.00nS	2.81V	2.37V	3.48V
[Falling Waveform]			
R_fixture = 1.80k			
V_fixture = 3.00			
V_fixture_min = 2.70			
V_fixture_max = 3.60			
C_fixture = 1.000e-10F			
time	V(typ)	V(min)	V(max)
0.000S	3.00V	2.70V	3.60V
0.80nS	3.00V	2.70V	3.60V
1.60nS	3.01V	2.70V	3.60V
2.40nS	3.01V	2.71V	3.45V
3.20nS	2.99V	2.71V	3.22V
4.00nS	2.93V	2.71V	2.94V
4.80nS	2.86V	2.71V	2.63V
5.60nS	2.78V	2.71V	2.40V
6.40nS	2.67V	2.70V	2.09V
7.20nS	2.55V	2.68V	1.79V
8.00nS	2.42V	2.65V	1.51V
8.80nS	2.28V	2.62V	1.25V
9.60nS	2.15V	2.58V	0.99V
10.40nS	2.01V	2.54V	0.80V
11.20nS	1.83V	2.47V	0.57V
12.00nS	1.69V	2.41V	0.44V
12.80nS	1.59V	2.36V	0.36V
13.60nS	1.46V	2.30V	0.26V
14.40nS	1.33V	2.23V	0.20V
15.20nS	1.21V	2.16V	0.15V
16.00nS	1.09V	2.09V	0.11V
16.80nS	0.95V	2.00V	82.42mV
17.60nS	0.82V	1.91V	61.62mV
18.40nS	0.76V	1.85V	55.17mV
19.20nS	0.69V	1.80V	48.71mV
20.00nS	0.61V	1.73V	42.73mV
20.80nS	0.54V	1.65V	39.45mV
21.60nS	0.46V	1.56V	36.02mV
22.40nS	0.39V	1.47V	34.28mV
23.20nS	0.35V	1.42V	33.35mV
24.00nS	0.32V	1.37V	32.80mV
24.80nS	0.28V	1.30V	32.35mV
25.60nS	0.24V	1.23V	31.93mV
26.40nS	0.21V	1.17V	31.73mV
27.20nS	0.19V	1.10V	31.56mV
28.00nS	0.17V	1.04V	31.44mV
28.80nS	0.15V	0.98V	31.38mV
29.60nS	0.13V	0.91V	31.32mV
30.40nS	0.12V	0.84V	31.28mV
31.20nS	0.11V	0.80V	31.27mV
32.00nS	0.10V	0.76V	31.25mV
32.80nS	93.41mV	0.71V	31.25mV
33.60nS	86.70mV	0.67V	31.24mV
34.40nS	80.90mV	0.63V	31.24mV
35.20nS	76.58mV	0.59V	31.23mV
36.00nS	72.35mV	0.55V	31.23mV

36.80nS	69.30mV	0.51V	31.23mV
37.60nS	66.53mV	0.48V	31.23mV
38.40nS	63.71mV	0.44V	31.23mV
39.20nS	61.52mV	0.40V	31.23mV
40.00nS	60.20mV	0.38V	31.23mV

| End [Model] tristate_driver

| *****
 | Model input
 | *****

[Model]	input		
Model_type	Input		
C_comp	5.00pF	5.00pF	5.00pF

[Temperature Range]	25.00	85.00	10.00
[Voltage Range]	2.60V	2.40V	3.00V

[GND_clamp]

voltage	I(typ)	I(min)	I(max)
-1.80	-4mA	-10mA	-7uA
-0.60	-2.65mA	-5.06mA	-32.18nA
-0.50	-56.57uA	-0.21mA	-32.18nA
-0.40	-1.15uA	-0.21mA	-0.22nA
-0.30	-23.56nA	-0.33uA	-2.13pA
-0.20	-0.48nA	-0.33uA	-0.41pA
-0.10	-9.80pA	-12.30nA	-0.20pA
0.00	0.000A	0.000A	0.000A
0.00	0.000A	0.000A	0.000A
0.10	0.22pA	50.33pA	0.20pA
0.20	0.44pA	0.10nA	0.40pA
0.30	0.66pA	0.15nA	0.60pA
0.40	0.88pA	0.20nA	0.80pA
0.50	1.10pA	0.25nA	1.00pA
0.60	1.32pA	0.30nA	1.20pA
0.70	1.54pA	0.35nA	1.40pA
0.80	1.76pA	0.40nA	1.60pA
0.90	1.98pA	0.45nA	1.80pA
1.00	2.20pA	0.50nA	2.00pA
1.10	2.42pA	0.55nA	2.20pA
1.20	2.64pA	0.60nA	2.40pA
1.30	2.86pA	0.65nA	2.60pA
1.40	3.08pA	0.70nA	2.80pA
1.50	3.30pA	0.75nA	3.00pA
1.60	3.52pA	0.81nA	3.20pA
1.70	3.74pA	0.86nA	3.40pA
1.80	3.96pA	0.91nA	3.60pA

[POWER_clamp]

voltage	I(typ)	I(min)	I(max)
-3.30	13.20pA	12.60pA	13.80pA
-3.20	13.00pA	12.40pA	13.60pA
-3.10	12.80pA	12.20pA	13.40pA

-3.00	12.60pA	12.00pA	13.20pA
-2.90	12.40pA	11.80pA	13.00pA
-2.80	12.20pA	11.60pA	12.80pA
-2.70	12.00pA	11.40pA	12.60pA
-2.60	11.80pA	11.20pA	12.40pA
-2.50	11.60pA	11.00pA	12.20pA
-2.40	11.40pA	10.80pA	12.00pA
-2.30	11.20pA	10.60pA	11.80pA
-2.20	11.00pA	10.40pA	11.60pA
-2.10	10.80pA	10.20pA	11.40pA
-2.00	10.60pA	10.00pA	11.20pA
-1.90	10.40pA	9.80pA	11.00pA
-1.80	10.20pA	9.60pA	10.80pA
-1.70	10.00pA	9.40pA	10.60pA
-1.60	9.80pA	9.20pA	10.40pA
-1.50	9.60pA	9.00pA	10.20pA
-1.40	9.40pA	8.80pA	10.00pA
-1.30	9.20pA	8.60pA	9.80pA
-1.20	9.00pA	8.40pA	9.60pA
-1.10	8.80pA	8.20pA	9.40pA
-1.00	8.60pA	8.00pA	9.20pA
-0.90	8.40pA	7.80pA	9.00pA
-0.80	8.20pA	7.60pA	8.80pA
-0.70	8.00pA	7.40pA	8.60pA
-0.60	7.80pA	7.20pA	8.40pA
-0.50	7.60pA	7.00pA	8.20pA
-0.40	7.40pA	6.80pA	8.00pA
-0.30	7.20pA	6.60pA	7.80pA
-0.20	7.00pA	6.40pA	7.60pA
-0.10	6.80pA	6.20pA	7.40pA
0.00	6.60pA	6.00pA	7.20pA

| End [Model] input

| End [Component] AT28BV256

[End]