R3200x Series

Reset IC

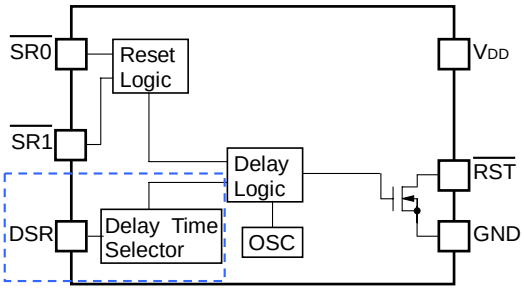
The R3200x Series are reset timer ICs with two input signals for mobile equipments which require long interval. R3200x has two active-low input pins ($\overline{SR0}$ and $\overline{SR1}$) which generate reset signals after output delay time when both input pins are activated at the same time. R3200x has two versions that are different in output delay time settings and output release method. R3200x001x: Output delay time selectable (7.5s or 11.25s) by connecting DSR pin to either GND or V_{DD}. The reset signal will be canceled if either of the input pin becomes "H". Until either input pin becomes "H", the reset signal will be continually outputted. R3200x002x: Output delay time is fixed at 7.5s. After the reset signal is being output 0.234s, it will be released automatically or if either of the input pin becomes "H", the reset signal will be canceled. While the reset signals are remaining active or being sent out, the ICs provide ultra-low supply current. In addition to DFN1216-8 package, a 2mm square DFN(PLP)2020-8 package is also available.

FEATURES

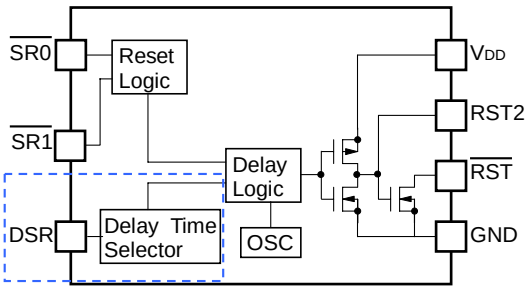
- Supply Current (I_{SS1}) ····· Typ. 0.28μA (V_{DD}=5.5V, at standby)
- Supply Current (I_{SS2}) ····· Typ. 3μA (V_{DD}=5.5V, at active before reset signal output)
- Supply Current (I_{SS3}) ····· Typ. 0.45μA (V_{DD}=5.5V, at active after reset signal output)
- Operating Voltage Range (V_{DD}) ····· 1.65V to 5.5V
- Output Delay ····· Typ. 7.5s or Typ. 11.25s (001), Typ. 7.5s (002)
- Output Delay Accuracy ·· ± 20%
- Output Release Time ··· 0.234s (Accuracy: ± 20%) (002)
- Two Output Types ····· Nch. Open Drain and CMOS
- Packages ····· DFN(PLP)2020-8B, DFN1216-8

BLOCK DIAGRAMS

R3200xxxxA
(Nch. open drain output)



R3200xxxxB
(Nch. open drain output and CMOS output)



Blue Line: R3200x001x only

SELECTION GUIDES

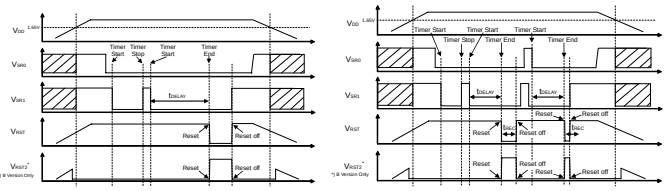
Halogen Free	Package	Q'ty per Reel	Part No.
H/F	DFN(PLP)2020-8B	5,000 pcs	R3200Kxxx∗-TR
H/F	DFN1216-8	5,000 pcs	R3200Lxxx∗-E2

xxx :Specify a combination of output delay time and output release method.
(001) 7.5s or 11.25s, Release of reset signal is manual operation.
(002) 7.5s, Release of reset signals are manual or automatic operation.
(Automatic release after 0.234s*)
∗ :Select the output type from (A) Nch. open drain or
(B) Nch. open drain, CMOS.

*) if either $\overline{SR0}$ or $\overline{SR1}$ becomes "H", the reset signal will be canceled.

TIMING CHART

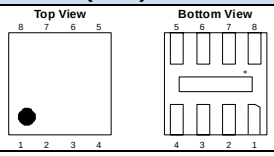
R3200x001x **R3200x002x**



When both $\overline{SR0}$ and $\overline{SR1}$ voltages become "L", the timer operation will start. After the output delay time (t_{DELAY}), the reset signal will be outputted.
001x: While the reset signal is being outputted, either $\overline{SR0}$ or $\overline{SR1}$ voltage becomes "H", the reset signal will be canceled. Until either $\overline{SR0}$ or $\overline{SR1}$ voltage becomes "H", the reset signal will be continually outputted.
002x: After reset signal is being sent 0.234s, it will be released automatically, or if either $\overline{SR0}$ or $\overline{SR1}$ becomes "H", the reset signal will be canceled.

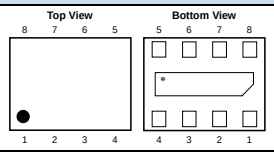
PACKAGES

DFN(PLP)2020-8B



1	NC(xxxA), RST2 (xxxB)
2	GND
3	$\overline{SR1}$
4	$\overline{RST}$

DFN1216-8

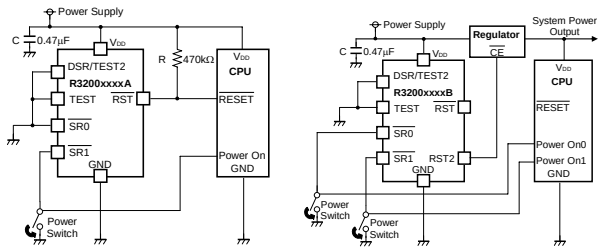


5	DSR(001), TEST2(002)
6	TEST
7	$\overline{SR0}$
8	V_{DD}

∗) The tab is substrate level (GND).

TYPICAL APPLICATION

R3200xxxxA **R3200xxxxB**



C: 0.47μF GRM155B30J474KE18 (MURATA)

APPLICATIONS

- Mobile phone, Smartphone
- Portable Games
- E-book, Tablet devices
- Personal Navigation Devices

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