

Is Now Part of



## ON Semiconductor ${ }^{\oplus}$

## To learn more about ON Semiconductor, please visit our website at www.onsemi.com

Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore ( $\_$), the underscore ( $\_$) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.onsemi.com. Please email any questions regarding the system integration to Fairchild questions@onsemi.com.

[^0]
## NC7SZ66 <br> Low Voltage Single SPST Normally Open Bus Switch

## Features

－Broad $\mathrm{V}_{\mathrm{Cc}}$ Operating Range： 1.65 V to 5.5 V
－Rail－to－Rail Signal Handling
－Power Down High－Impedance Inputs／Outputs
－ $5 \Omega$ Switch Connection between Two Ports
－Minimal Propagation Delay through the Switch
－Low I Cc
－Zero Bounce in Flow－Through Mode
－Control Input Compatible with CMOS Input Levels
－Ultra－Small MicroPak ${ }^{\text {M }}$ Packages
－Space－Saving SOT23 and SC70 Packages

## Description

The NC7SZ66 is a ultra high－speed（UHS）CMOS compatible single－pole／single－throw（SPST）bus switch． The LOW on resistance of the switch allows inputs to be connected to outputs with minimal propagation delay and without generating additional ground bounce noise． The device is organized as a 1－bit switch with a switch enable（OE）signal．When OE is HIGH，the switch is on and port $A$ is connected to port $B$ ．When OE is LOW，the switch is open and a high－impedance state exists between the two ports．．

## Ordering Information

| Part Number | Top Mark | Package | Packing Method |
| :---: | :---: | :--- | :---: |
| NC7SZ66M5X | $7 Z 66$ | 5－Lead SOT23，JEDEC MO－178 1.6 mm | 3000 Units on Tape \＆Reel |
| NC7SZ66P5X | Z66 | 5－Lead SC70，EIAJ SC－88a，1．25 mm Wide | 3000 Units on Tape \＆Reel |
| NC7SZ66L6X | EE | 6－Lead，MicroPak ${ }^{\text {TM }}, 1 \times 1 \mathrm{~mm}$ Wide | 5000 Units on Tape \＆Reel |

## Connection Diagrams



Figure 1. Logic Symbol

## Pin Configurations



Figure 2. SC70 and SOT23 (Top View)


Figure 3. MicroPak ${ }^{\text {TM }}$ (Top Through View)

## Pin Definitions

| Pin \# SC70 / SOT23 | Pin \# MicroPak |  |  |
| :---: | :---: | :---: | :--- |
| M | Name | Description |  |
| 1 | 1 | A | Bus A I/O |
| 2 | 2 | B | Bus B I/O |
| 3 | 3 | GND | Ground |
| 4 | 4 | OE | Switch Enable Input |
| 5 | 6 | $V_{\mathrm{CC}}$ | Supply Voltage |
|  | 5 | NC | No Connect |

## Function Table

| OE | $\mathbf{B}_{\mathbf{0}}$ | Function |
| :---: | :---: | :---: |
| L | High Z-State | Disconnected |
| H | $\mathrm{A}_{0}$ | Connect |

H = HIGH Logic Level
L = LOW Logic Level

## Absolute Maximum Ratings

Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only.

| Symbol | Parameter |  | Min. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{V}_{\text {cc }}$ | Supply Voltage |  | -0.5 | 7.0 | V |
| $\mathrm{V}_{\text {S }}$ | DC Switch Voltage ${ }^{(1)}$ |  | -0.5 | $\mathrm{V}_{\mathrm{cc}}$ to 0.5 | V |
| $\mathrm{V}_{\text {IN }}$ | DC Input Voltage |  | -0.5 | 7.0 | V |
| $\mathrm{I}_{\text {K }}$ | DC Input Diode Current | $\mathrm{V}_{\text {IN }}<0 \mathrm{~V}$ |  | -50 | mA |
| Iout | DC Output Sink Current |  |  | 128 | mA |
| $\mathrm{I}_{\mathrm{CC}}$ or $\mathrm{I}_{\text {GND }}$ | DC V Cc or Ground Current |  |  | $\pm 100$ | mA |
| $\mathrm{T}_{\text {STG }}$ | Storage Temperature Range |  | -65 | +150 | ${ }^{\circ} \mathrm{C}$ |
| $\mathrm{T}_{\mathrm{J}}$ | Junction Temperature Under Bias |  |  | +150 | ${ }^{\circ} \mathrm{C}$ |
| $\mathrm{T}_{\mathrm{L}}$ | Junction Lead Temperature (Soldering, 10 Seconds) |  |  | +260 | ${ }^{\circ} \mathrm{C}$ |
| $\mathrm{P}_{\mathrm{D}}$ | Power Dissipation at $+85^{\circ} \mathrm{C}$ | SOT-23 |  | 200 | mW |
|  |  | SC70-5 |  | 150 |  |
| ESD | Human Body Model, JEDEC:JESD22-A114 |  |  | 4000 | V |
|  | Charge Device Model: JEDEC:JESD22-C101 |  |  | 1500 |  |

## Note:

1. The input and output negative voltage ratings may be exceeded if the input and output diode current ratings are observed.

## Recommended Operating Conditions

The Recommended Operating Conditions table defines the conditions for actual device operation. Recommended operating conditions are specified to ensure optimal performance to the datasheet specifications. Fairchild does not recommend exceeding them or designing to Absolute Maximum Ratings.

| Symbol | Parameter | Conditions | Min. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{V}_{\text {cc }}$ | Supply Voltage Operating |  | 1.65 | 5.50 | V |
| $\mathrm{V}_{\text {IN }}$ | Input Voltage |  | 0 | 5.5 | V |
| $\mathrm{V}_{\mathrm{S}}$ | Switch Input Voltage |  | 0 | $\mathrm{V}_{\mathrm{Cc}}$ | V |
| $V_{\text {OUT }}$ | Output Voltage |  | 0 | $\mathrm{V}_{\mathrm{cc}}$ | V |
| $\mathrm{t}_{\mathrm{r}}, \mathrm{t}_{\mathrm{f}}$ | Input Rise and Fall Times | $\mathrm{V}_{\mathrm{cc}}=2.3 \mathrm{~V}-3.6 \mathrm{~V}$ | 0 | 10 | ns/V |
|  |  | $\mathrm{V}_{\mathrm{cc}}=4.5 \mathrm{~V}-5.5 \mathrm{~V}$ | 0 | 5 |  |
|  |  | Switching I/O | 0 | DC |  |
| $\mathrm{T}_{\text {A }}$ | Operating Temperature |  | -40 | +85 | ${ }^{\circ} \mathrm{C}$ |
| $\theta_{\text {JA }}$ | Thermal Resistance | SOT-23 |  | 300 | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
|  |  | SC70-5 |  | 425 |  |

## Note:

2. Unused inputs must be held HIGH or LOW; they may not float.

## DC Electrical Characteristics

All typical values are at the specified $\mathrm{V}_{\mathrm{CC}}$, and $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$

| Symbol | Parameter | $\mathrm{V}_{\mathrm{cc}}$ | Conditions | $\mathrm{T}_{\mathrm{A}}=-40$ to $+85^{\circ} \mathrm{C}$ |  |  | $\mathrm{T}_{\mathrm{A}}=+25^{\circ} \mathrm{C}$ |  | Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Min. | Typ. | Max. | Min. | Typ. |  |
| $\mathrm{V}_{\text {IH }}$ | HIGH Level Input Voltage | $\begin{gathered} 1.65 \text { to } \\ 1.95 \end{gathered}$ |  | $0.75 \mathrm{~V}_{\text {cc }}$ |  |  |  |  |  |
|  |  | $\begin{gathered} 2.30 \text { to } \\ 5.50 \end{gathered}$ |  | $0.7 \mathrm{~V}_{\mathrm{cc}}$ |  |  |  |  |  |
| $V_{\text {IL }}$ | LOW Level Input Voltage | $\begin{gathered} 1.65 \text { to } \\ 1.95 \end{gathered}$ |  |  |  | $0.25 \mathrm{~V}_{\mathrm{cc}}$ |  |  | V |
|  |  | $\begin{gathered} 2.30 \text { to } \\ 5.50 \end{gathered}$ |  |  |  | $0.3 \mathrm{~V}_{\mathrm{cc}}$ |  |  |  |
| $\mathrm{I}_{\mathrm{N}}$ | Control Input Leakage Current | 0 to 5.5 | $0 \leq \mathrm{V}_{\text {IN }} \leq 5.5 \mathrm{~V}$ |  | $\pm 0.05$ | $\pm 1.00$ |  |  | $\mu \mathrm{A}$ |
| Ioff | Off Leakage Current | $\begin{gathered} 1.65 \text { to } \\ 5.50 \end{gathered}$ | $0 \leq \mathrm{A}, \mathrm{B} \leq \mathrm{V}_{\mathrm{CC}}$ |  | $\pm 0.05$ | $\pm 10.00$ |  |  | $\mu \mathrm{A}$ |
| $\mathrm{R}_{\mathrm{ON}}$ | Switch On Resistance ${ }^{(3)}$ | 4.5 | $\mathrm{V}_{\text {IN }}=0 \mathrm{~V}, \mathrm{I}_{\mathrm{IN}}=30 \mathrm{~mA}$ |  | 3 | 7 |  |  | $\Omega$ |
|  |  |  | $\mathrm{V}_{\mathrm{IN}}=2.4 \mathrm{~V}, \mathrm{l}_{\mathrm{IN}}=15 \mathrm{~mA}$ |  | 5 | 12 |  |  |  |
|  |  |  | $\mathrm{V}_{\mathrm{IN}}=4.5 \mathrm{~V}, \mathrm{l}_{\mathrm{IN}}=30 \mathrm{~mA}$ |  | 7 | 15 |  |  |  |
|  |  | 3.0 | $\mathrm{V}_{\mathrm{IN}^{\prime}}=0 \mathrm{~V}, \mathrm{I}_{\mathrm{IN}}=24 \mathrm{~mA}$ |  | 4 | 9 |  |  |  |
|  |  |  | $\mathrm{V}_{\mathrm{IN}}=3 \mathrm{~V}, \mathrm{l}_{\mathrm{IN}}=24 \mathrm{~mA}$ |  | 10 | 20 |  |  |  |
|  |  | 2.30 |  |  | 5 | 12 |  |  |  |
|  |  |  |  |  | 13 | 30 |  |  |  |
|  |  | 1.8 | $\mathrm{V}_{\mathrm{IN}^{\prime}}=0 \mathrm{~V}, \mathrm{I}_{\mathrm{IN}^{\prime}}=4 \mathrm{~mA}$ |  | 7 | 28 |  |  |  |
|  |  |  |  |  | 25 | 60 |  |  |  |
| $\mathrm{R}_{\text {flat }}$ | On <br> Resistance Flatness ${ }^{(3,4,5)}$ | 5.0 | $\begin{aligned} & \mathrm{I}_{\mathrm{A}}=-30 \mathrm{~mA}, \\ & 0 \leq \mathrm{V}_{\mathrm{Bn}} \leq \mathrm{V}_{\mathrm{CC}} \end{aligned}$ |  |  |  |  | 6 | $\Omega$ |
|  |  | 3.3 | $\begin{aligned} & \mathrm{I}_{\mathrm{A}}=-24 \mathrm{~mA}, \\ & 0 \leq \mathrm{V}_{\mathrm{Bn}} \leq \mathrm{V}_{\mathrm{CC}} \end{aligned}$ |  |  |  |  | 12 |  |
|  |  | 2.5 | $\begin{aligned} & \mathrm{I}_{\mathrm{A}}=-8 \mathrm{~mA}, \\ & 0 \leq \mathrm{V}_{\mathrm{Bn}} \leq \mathrm{V}_{\mathrm{CC}} \end{aligned}$ |  |  |  |  | 28 |  |
|  |  | 1.8 | $\begin{aligned} & \mathrm{I}_{\mathrm{A}}=-4 \mathrm{~mA}, \\ & 0 \leq \mathrm{V}_{\mathrm{Bn}} \leq \mathrm{V}_{\mathrm{CC}} \end{aligned}$ |  |  |  |  | 125 |  |
| $\mathrm{I}_{\mathrm{cc}}$ | Quiescent Supply Current | $\begin{gathered} 1.65 \text { to } \\ 5.50 \end{gathered}$ | $\begin{aligned} & \mathrm{V}_{1 \mathrm{~N}}=\mathrm{V}_{\mathrm{CC}} \text { or } \mathrm{GND}, \\ & \mathrm{l}_{\mathrm{OUT}}=0 \end{aligned}$ |  | 0.05 | 10.00 |  |  | $\mu \mathrm{A}$ |

Notes:
3. Measured by the voltage drop between pins $A$ and $B$ at the indicated current through the switch. On resistance is determined by the lower of the voltages on the two (A or B) pins.
4. Parameter is characterized but not tested in production.
5. Flatness is defined as the difference between the maximum and minimum value of on resistance over the specified range of conditions.

## AC Electrical Characteristics

All typical values are at the specified $\mathrm{V}_{\mathrm{CC}}$, and $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$.

| Symbol | Parameter | $\mathrm{V}_{\mathrm{cc}}$ | Conditions | $\begin{gathered} \mathrm{T}_{A}=-40 \text { to }+85^{\circ} \mathrm{C}, \\ \mathrm{C}_{\mathrm{L}}=50 \mathrm{Pf} . \\ \mathrm{RU}=\mathrm{RD}=500 \Omega \end{gathered}$ |  |  | Units | Figure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Min. | Typ. | Max. |  |  |
| $\mathrm{t}_{\text {PHL }}$, $\mathrm{t}_{\text {PLH }}$ | Propagation Delay Bus-to-Bus ${ }^{(6)}$ | 1.65 to 1.95 | $\mathrm{V}_{\text {IN }}=0 \mathrm{PEN}$ |  |  | 4.3 | ns | Figure 5 Figure 6 |
|  |  | 2.3 to 2.7 |  |  |  | 1.2 |  |  |
|  |  | 3.0 to 3.6 |  |  |  | 0.8 |  |  |
|  |  | 4.5 to 5.5 |  |  |  | 0.3 |  |  |
| $t_{\text {pzL }}$, tpzH | Output Enable Time | 1.65 to 1.95 | $\mathrm{V}_{\mathrm{IN}}=2 \times \mathrm{V}_{\mathrm{cc}}$ for $\mathrm{t}_{\mathrm{PzL}}$, $\mathrm{V}_{\mathrm{IN}}=0 \mathrm{~V}$ for $\mathrm{t}_{\text {PzH }}$ | 1.5 | 7.0 | 14.2 | ns | Figure 5 Figure 6 |
|  |  | 2.3 to 2.7 |  | 1.5 | 3.3 | 7.0 |  |  |
|  |  | 3.0 to 3.6 |  | 1.5 | 2.4 | 5.5 |  |  |
|  |  | 4.5 to 5.5 |  | 1.5 | 2.0 | 4.5 |  |  |
| $\mathrm{t}_{\text {PLZ }}$, tPHz | Output Disable Time | 1.65 to 1.95 | $V_{I N}=2 \times V_{C C} \text { for } t_{\text {PLZ }}$$\mathrm{V}_{\mathrm{IN}}=0 \mathrm{~V} \text { for } \mathrm{t}_{\mathrm{PHZ}}$ | 1.5 | 9.2 | 18.2 | ns | Figure 5 Figure 6 |
|  |  | 2.3 to 2.7 |  | 1.5 | 5.3 | 9.0 |  |  |
|  |  | 3.0 to 3.6 |  | 1.5 | 4.0 | 7.0 |  |  |
|  |  | 4.5 to 5.5 |  | 1.5 | 2.7 | 5.0 |  |  |
| $\mathrm{Cin}_{\text {IN }}$ | Control Pin Input Capacitance |  | $\mathrm{V}_{\mathrm{cc}}=0$ |  | 2 |  | pF |  |
| $\mathrm{Cl}_{1 / \mathrm{O}}$ | Input / Output Capacitance |  | $\mathrm{V}_{\mathrm{cc}}=05.0 \mathrm{~V}$ |  | 6 |  | pF |  |

## Note:

6. This parameter is guaranteed by design but is not tested. The switch contributes no propagation delay other than the RC delay of the typical on resistance of the switch and the 50 pF load capacitance, when driven by an ideal voltage source (zero output impedance).


## Notes:

7. Input driven by $50 \Omega$; source terminated in $50 \Omega$.
8. $C_{L}$ includes load and stray capacitance.
9. Input PRR=1.0 MHz; $\mathrm{t}_{\mathrm{w}}=500 \mathrm{~ns}$.

Figure 4. AC Test Circuit


Figure 5. AC Waveforms

## Physical Dimensions



Figure 6. 5-Lead SOT23, JEDEC MO-178 1.6 mm
Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings:
http://www.fairchildsemi.com/packagingl.

## Tape and Reel Specifications

Please visit Fairchild Semiconductor's online packaging area for the most recent tape and reel specifications:
http://www.fairchildsemi.com/packaging/SOT23-5L tr.pdf.

| Package Designator | Tape Section | Cavity Number | Cavity Status | Cover Type Status |
| :---: | :---: | :---: | :---: | :---: |
| M5X | Leader (Start End) | 125 (Typical) | Empty | Sealed |
|  | Carrier | 3000 | Filled | Sealed |
|  | Trailer (Hub End) | 75 (Typical) | Empty | Sealed |

## Physical Dimensions



NAAO5AREV5
Figure 7. 5-Lead, SC70, EIAJ SC-88a, 1.25 mm Wide

Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings: http://www.fairchildsemi.com/packagingl.

## Tape and Reel Specifications

Please visit Fairchild Semiconductor's online packaging area for the most recent tape and reel specifications: http://www.fairchildsemi.com/products/analog/pdf/sc70-5 tr.pdf.

| Package Designator | Tape Section | Cavity Number | Cavity Status | Cover Type Status |
| :---: | :---: | :---: | :---: | :---: |
| P5X | Leader (Start End) | 125 (Typical) | Empty | Sealed |
|  | Carrier | 3000 | Filled | Sealed |
|  | Trailer (Hub End) | 75 (Typical) | Empty | Sealed |

## Physical Dimensions



Figure 8. 6-Lead, MicroPak ${ }^{\text {TM }}, 1.0 \mathrm{~mm}$ Wide

Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings:
http://www.fairchildsemi.com/packagingl.

## Tape and Reel Specifications

Please visit Fairchild Semiconductor's online packaging area for the most recent tape and reel specifications: http://www.fairchildsemi.com/products/logic/pdf/micropak tr.pdf.

| Package Designator | Tape Section | Cavity Number | Cavity Status | Cover Type Status |
| :---: | :---: | :---: | :---: | :---: |
| L6X | Leader (Start End) | 125 (Typical) | Empty | Sealed |
|  | Carrier | 5000 | Filled | Sealed |
|  | Trailer (Hub End) | 75 (Typical) | Empty | Sealed |

## TRADEMARKS

The following includes registered and unregistered trademarks and service marks, owned by Fairchild Serriconductor and/or its global subsidiaries, and is not intended to be an exhaustive list of all such trademarks.

| AccuPowertm $\mathrm{AX}-\mathrm{CAP}^{\mathrm{m}_{*}}$ | F-PFS ${ }^{\text {TM }}$ FRFET | 0 | Sync-Lock ${ }^{\text {Tm }}$ SGSTEM SENERAL |
| :---: | :---: | :---: | :---: |
| BitSiC'm | Global Power Resource ${ }^{\text {sin }}$ | PowerTrench ${ }^{\text {® }}$ | $\square \mathrm{GENERAL}^{\text {ax }}$ |
| Build it Now ${ }^{\text {Tm }}$ | GreenBridge ${ }^{\text {™ }}$ | Power $\times \mathrm{S}^{\text {TM }}$ | TinyBoost ${ }^{\text {T }}$ |
| CorePLUS ${ }^{\text {TM }}$ | Green FPS ${ }^{\text {m }}$ | Programmable Active Droop ${ }^{\text {TM }}$ | TinyBuck ${ }^{\text {® }}$ |
| CorePOMER ${ }^{\text {TM }}$ | Green FPS ${ }^{\text {m }}$ e-Series ${ }^{\text {m }}$ | QFET ${ }^{\text {a }}$ | TinyCalc ${ }^{\text {mm }}$ |
| CROSSVOLTTM | Gmax ${ }^{\text {™ }}$ | QSTM | TinyLogic ${ }^{\text {(1) }}$ |
| CTL'M | GTOTm | Quiet Series ${ }^{\text {TM }}$ | TINYOPTOTM |
| Current Transfer Logic ${ }^{\text {TM }}$ | IntelliMAX ${ }^{\text {tm }}$ | RapidConfigure ${ }^{\text {m }}$ | TinyPowertm |
| DEUXPEED ${ }^{\text {a }}$ | ISOPLANAR ${ }^{\text {TM }}$ | $)^{\text {Tm }}$ | TinyPMM ${ }^{\text {tm }}$ |
| Dual Cool ${ }^{\text {TM }}$ | Making Small Speakers Sound Louder | Saving our world 1 miAMNMW at a timeTM | Tiny Míre ${ }^{\text {™ }}$ |
| Ecospark ${ }^{\text {® }}$ | and Better ${ }^{\text {TM }}$ | Saving our world, $1 \mathrm{~mW} / \mathrm{N} / \mathrm{kW}$ at a time ${ }^{\text {TM }}$ | TranSic ${ }^{\text {m }}$ |
| EfficientMax ${ }^{\text {TM }}$ | MegaBuck ${ }^{\text {™ }}$ | SignalMise ${ }^{\text {™ }}$ | TriFault Detect ${ }^{\text {™ }}$ |
| ESBC'm | MICROCOUPLER ${ }^{\text {TM }}$ | SmartMax ${ }^{\text {TM }}$ | TRUECURRENT ${ }^{\text {®** }}$ |
| ${ }^{8}$ | MicroFeTm | SMART STARTTM | $\mu$ SerDes ${ }^{\text {m }}$ |
|  | MicroPak ${ }^{\text {™ }}$ | Solutions for Your Success ${ }^{\text {TM }}$ |  |
| Fairchild ${ }^{(1)}$ | MicroPak ${ }^{\text {Tm }}$ | SPM ${ }^{\text {® }}$ | Serdes |
| Fairchild Semiconductor ${ }^{\text {® }}$ <br> FACT Quiet Seriestm | MillerDrive ${ }^{\text {m }}$ | STEALTH ${ }^{\text {TM }}$ | UHC ${ }^{\text {Es }}$ |
| FACT ${ }^{\text {a }}$ | MotionMax'm | SuperSOT ${ }^{\text {Tm/3 }}$ | Ultra FRFET ${ }^{\text {TM }}$ |
| FAST ${ }^{\text {® }}$ | mWSaver | SuperSOT ${ }^{\text {TM-6 }}$ | UniFET ${ }^{\text {Tm }}$ |
| FastvCore ${ }^{\text {TM }}$ | OPTOLOGIC® | SuperSOTTM-8 | Visualmaxtm |
| FETBench ${ }^{\text {m }}$ | OPTOPLANAR | SupreMOS ${ }^{\text {a }}$ | VisualMax ${ }^{\text {TM }}$ |
| FPS ${ }^{\text {™ }}$ |  | SyncFETTM | $V^{\prime 2}$ tageflus ${ }^{\text {Tm }}$ $X S^{\top T M}$ |

## DISCLAIMER

FAIRCHID SEMICONDUCTORRESERVES THE RIGHT TOMAKE CHANGES MTHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TOIMPROVE RELIABILTY, FUNCTION, OR DESIGN. FAIRCHILD DOESNOT ASSUME ANY LIABILTY ARISING OUT OF THE APPLICATION ORUSE OF ANY PRODUCT OR CIRCUITDESCRIBED HEREIN; NEITHERDOES IT CONVEY ANY LICENSE UNDERITS PATENTRGHTS, NOR THERIGHTS OF OTHERS THESE SPECIFICATIONS DO NOT EXPAND THE TERMS OF FAIRCHID'S WORLDMDE TERMS AND CONDITONS, SPECIFICALLY THE WARRANTY THEREIN, WHICH COVERS THESE PRODUCTS

## LIFE SUPPORT POLICY

FAIRCHID'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS MTHOUT THE EXPRESS MRITTEN APFROVAL OF FAIRCHID SEMICONDUCTOR CORPORATION

## As used herein

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
2. A critical component in any component of a life support, device, or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

## ANTI-COUNTERFEITING POLICY

Fairchild Semiconductor Comoration's Anti-Counterfeiting Policy. Fairchild's Anti-Counterfeiting Policy is also stated on our extemal website, whw.fairchildsemi.com, under Sales Support.
Counterfeiting of semiconductor parts is a growing problem in the industry. All manufacturers of semiconductor products are experiencing counterfeiting of their parts. Customers who inadvertently purchase counterfeit parts experience many problems such as loss of brand reputation, substandard performance, failed applications, and increased cost of production and manufacturing delays. Fairchild is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. Fairchild strongly encourages customers to purchase Fairchild parts either directly from Fairchild or from Authorized Fairchild Distributors who are listed by country on our web page cited above. Products customers buy either from Fairchild directly or from Authorized Fairchild Distributors are genuine parts, have full traceability, meet Fairchild's quality standards for handling and storage and provide access to Fairchild's full range of up-to-date technical and product information. Fairchild and our Authorized Distributors will stand behind all warranties and will appropriately address ary warranty issues that may arise. Fairchild will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. Fairchild is comrritted to conbat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

## PRODUCT STATUS DEFINITIONS

Definition of Terms

| Datas heet Identification | Product Status | Definition |
| :---: | :---: | :--- |
| Advance Information | Formative / In Design | Datasheet contains the design specifications for product development. Specifications may change <br> in any manner without notice. |
| Preliminary | First Production | Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild <br> Semiconductor reserves the right to make changes at any time without notice to improve design. |
| No Identification Needed | Full Production | Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make <br> changes at any time without notice to improve the design. |
| Obsolete | Not In Production | Datasheet contains specifications on a product that is discontinued by Fairchild Semiconductor. <br> The datasheet is for reference information only. |

Rev. 166


#### Abstract

ON Semiconductor and ON are trademarks of Semiconductor Components Industries, LLC dba ON Semiconductor or its subsidiaries in the United States and/or other countries. ON Semiconductor owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of ON Semiconductor's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. ON Semiconductor reserves the right to make changes without further notice to any products herein. ON Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does ON Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using ON Semiconductor products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by ON Semiconductor. "Typical" parameters which may be provided in ON Semiconductor data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. ON Semiconductor does not convey any license under its patent rights nor the rights of others. ON Semiconductor products are not designed, intended, or authorized for use as a critical component in life support systems or any FDA Class 3 medical devices or medical devices with a same or similar classification in a foreign jurisdiction or any devices intended for implantation in the human body. Should Buyer purchase or use ON Semiconductor products for any such unintended or unauthorized application, Buyer shall indemnify and hold ON Semiconductor and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that ON Semiconductor was negligent regarding the design or manufacture of the part. ON Semiconductor is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.


## PUBLICATION ORDERING INFORMATION

## LITERATURE FULFILLMENT:

Literature Distribution Center for ON Semiconductor 19521 E. 32nd Pkwy, Aurora, Colorado 80011 USA Phone: 303-675-2175 or 800-344-3860 Toll Free USA/Canada Fax: 303-675-2176 or 800-344-3867 Toll Free USA/Canada Email: orderlit@onsemi.com
N. American Technical Support: 800-282-9855 Toll Free USA/Canada
Europe, Middle East and Africa Technical Support:
Phone: 421337902910
Japan Customer Focus Center
Phone: 81-3-5817-1050

ON Semiconductor Website: www.onsemi.com
Order Literature: http://www.onsemi.com/orderlit
For additional information, please contact your local Sales Representative

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Analogue Switch ICs category:
Click to view products by ON Semiconductor manufacturer:
Other Similar products are found below :
FSA3051TMX NLAS4684FCTCG NLAS5223BLMNR2G NLX2G66DMUTCG 425541DB 425528R 099044FB NLAS5123MNR2G PI5A4157CEX NLAS4717EPFCT1G PI5A3167CCEX SLAS3158MNR2G PI5A392AQE PI5A4157ZUEX PI5A3166TAEX FSA634UCX XS3A1T3157GMX TC4066BP(N,F) DG302BDJ-E3 PI5A100QEX HV2605FG-G HV2301FG-G RS2117YUTQK10 RS2118YUTQK10 RS2227XUTQK10 ADG452BRZ-REEL7 MAX4066ESD+ MAX391CPE+ MAX4730EXT+T MAX314CPE+ BU4066BCFV-E2 MAX313CPE+ BU4S66G2-TR NLASB3157MTR2G TS3A4751PWR NLAST4599DFT2G NLAST4599DTT1G DG300BDJ-E3 DG2503DB-T2-GE1 TC4W53FU(TE12L,F) 74HC2G66DC. 125 DG3257DN-T1-GE4 ADG619BRMZ-REEL ADG1611BRUZ-REEL7 DG2535EDQ-T1-GE3 LTC201ACN\#PBF 74LV4066DB,118 ISL43410IUZ FSA2275AUMX DIO1500WL12


[^0]:    
    
    
    
    
    
    
    
    
     is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.

