



**TF Semiconductor
Solutions**



Gate Driver ICs

Single Phase Gate Driver ICs

High-Side/Low-Side

| Part | Name | IO+/IO- | Inputs | Deadtime | ton/toff | tr/td | Package |
|----------|--|-------------|------------|----------|-------------|------------|--------------------------|
| TF2101M | 600V High-Side/Low-Side Gate Drive | 290mA/600mA | HIN/LIN | none | 160ns/150ns | 70ns/35ns | SOIC14(N)/SOIC8(N)/PDIP8 |
| TF2106M | 600V High-Side/Low-Side Gate Drive | 290mA/600mA | HIN/LIN | none | 220ns/200ns | 100ns/35ns | SOIC8(N)/PDIP8 |
| TF21064M | 600V High-Side/Low-Side Gate Drive | 200mA/600mA | HIN/LIN | none | 220ns/200ns | 100ns/35ns | SOIC14(N)/PDIP14 |
| TF2110M | 600V High-Side/Low-Side Gate Drive | 2.5A/2.5A | HIN/LIN/SD | none | 120ns/90ns | 25ns/17ns | SOIC16(W)/PDIP14 |
| TF2113M | 600V High-Side/Low-Side Gate Drive | 2.5A/2.5A | HIN/LIN/SD | none | 120ns/90ns | 25ns/17ns | SOIC16(W)/PDIP14 |
| TF2181M | 600V High-Side/Low-Side Gate Drive | 1.9A/2.3A | HIN/LIN | none | 180ns/220ns | 40ns/20ns | SOIC8(N)/PDIP8 |
| TF21814M | 600V High-Side/Low-Side Gate Drive | 1.9A/2.3A | HIN/LIN | none | 180ns/220ns | 40ns/20ns | SOIC14(N)/PDIP14 |
| TF2190M | 600V High-Side/Low-Side Gate Drive | 4.5A/4.5A | HIN/LIN | none | 140ns/140ns | 25ns/20ns | SOIC8(N) |
| TF21904M | 600V High-Side/Low-Side Gate Drive | 4.5A/4.5A | HIN/LIN | none | 140ns/140ns | 25ns/20ns | SOIC14(N) |
| TF2005M | 200V High-Side/Low-Side Gate Driver | 290mA/600mA | HIN/LIN | none | 220ns/200ns | 100ns/35ns | SOIC8(N) |
| TF2011M | 200V High-Side/Low-Side Gate Driver | 1.0A/1.0A | HIN/LIN | none | 120ns/120ns | 30ns/30ns | SOIC8(N) |
| TF2012M | 200V High-Side/Low-Side Gate Driver | 1.9A/2.3A | HIN/LIN | none | 180ns/220ns | 40ns/20ns | SOIC8(N) |
| TF0579U | 100V High Side/Low Side Gate Driver w/Integrated BSD | 1.5A/2.5A | HIN/LIN | none | 65ns/58ns | 27ns/20ns | DFN10 |



Single Phase Gate Driver ICs

Half-Bridge

| Part | Name | IO+/IO- | Inputs | Deadtime | ton/toff | tr/td | Package |
|-----------|------------------------------|-------------|----------|------------|-------------|------------|-----------|
| TF2003M | 200V Half-Bridge Gate Driver | 290mA/600mA | HIN/LIN* | 520ns | 680ns/150ns | 70ns/35ns | SOIC8(N) |
| TF2007U | 200V Half-Bridge Gate Driver | 290mA/600mA | HIN/LIN* | 420ns | 100ns/100ns | 70ns/35ns | SOIC8(N) |
| TF2103M | 600V Half-Bridge Gate Driver | 290mA/600mA | HIN/LIN* | 520ns | 680ns/150ns | 70ns/35ns | SOIC8(N) |
| TF2104M | 600V Half-Bridge Gate Driver | 290mA/600mA | IN/SD* | 520ns | 680ns/150ns | 70ns/35ns | SOIC8(N) |
| TF2183M* | 600V Half-Bridge Gate Driver | 1.9A/2.3A | HIN/LIN* | 400ns | 180ns/220ns | 40ns/20ns | SOIC8(N) |
| TF21834M* | 600V Half-Bridge Gate Driver | 1.9A/2.3A | HIN/LIN* | 400ns -5ms | 180ns/220ns | 40ns/20ns | SOIC14(N) |
| TF2184M | 600V Half-Bridge Gate Driver | 1.4A/1.8A | IN/SD* | 400ns | 680ns/270ns | 40ns/20ns | SOIC8(N) |
| TF21844M | 600V Half-Bridge Gate Driver | 1.4A/1.8A | IN/SD* | 400ns -5ms | 680ns/270ns | 40ns/20ns | SOIC14(N) |
| TF2304M | 600V Half-Bridge Gate Drive | 290mA/600mA | HIN/LIN | 100ns | 150ns/150ns | 70ns/35ns | SOIC8(N) |
| TF2108 | 600V Half-Bridge Gate Driver | 290mA/600mA | HIN/LIN* | 540ns | 220ns/200ns | 100ns/35ns | SOIC8(N) |
| TF21084 | 600V Half-Bridge Gate Driver | 200mA/600mA | HIN/LIN* | 540ns-5ms | 220ns/200ns | 100ns/35ns | SOIC14(N) |

* Samples Available - December 2022



3-Phase & Single-Phase Gate Driver ICs

3-Phase IC for BLDC Motor Controller & 3-Phase Inverters

| Part | Name | IO+/IO- | Inputs | Deadtime | ton/toff | tr/tf | Package |
|----------|--------------------------------------|-------------|--------------------|----------|-------------|-----------|---------|
| TF2136M | 600V 3-Phase Half-Bridge Gate Driver | 200mA/350mA | HIN*(x3), LIN*(x3) | 290ns | 330ns/330ns | 90ns/35ns | SOIC28 |
| TF21364M | 600V 3-Phase Half-Bridge Gate Driver | 200mA/350mA | HIN(x3), LIN(x3) | 290ns | 330ns/330ns | 90ns/35ns | SOIC28 |
| TF2388M | 600V 3-Phase Half-Bridge Gate Driver | 420mA/750mA | HIN*(x3), LIN*(x3) | 315ns | 120ns/120ns | 45ns/25ns | SOIC20 |
| TF2366M | 500V 3-Phase Half-Bridge Gate Driver | 420mA/750mA | HIN*(x3), LIN*(x3) | 315ns | 120ns/120ns | 45ns/25ns | SOIC20 |
| TF23892M | 600V 3-Phase Half-Bridge Gate Driver | 350mA/650mA | HIN*(x3), LIN*(x3) | 290ns | 270ns/270ns | 40ns/25ns | SOIC28 |

Single Phase (Low Side, High Side) Gate Drivers

| Part | Name | IO+/IO- | Inputs | Deadtime | ton/toff | tr/tf | Package |
|------------|---|-------------|----------------------------------|----------|-------------|-----------|----------|
| TF0211C | Single 1.9A High-Speed, Low-Side, Gate Driver | 1.9A/1.8A | *IN/IN | none | 35ns/35ns | 15ns/15ns | SOT23-5 |
| TF0211E | Single 1.9A High-Speed, Low-Side, Gate Driver | 1.9A/1.8A | EN/IN | none | 35ns/35ns | 15ns/15ns | SOT23-5 |
| TF0215 | Single 1.9A High-Speed, Low-Side, Gate Driver | 1.9A/1.8A | *IN/IN | none | 35ns/35ns | 15ns/15ns | SOT23-5 |
| TF0216 | Single 1.9A High-Speed, Low-Side, Gate Driver | 1.9A/1.8A | *IN/IN | none | 35ns/35ns | 15ns/15ns | SOT23-5 |
| TF0227/B/C | Dual 4.0A High Speed Low-Side Gate Driver | 4.0A/4.0A | INA/INB INA*/INB* INA*/INB | none | 40ns/35ns | 20ns/20ns | SOIC8(N) |
| TF2117 | 600V High Speed High-Side Gate Driver | 290mA/600mA | IN | none | 125ns/105ns | 75ns/35ns | SOIC8(N) |
| TF2118 | 600V High Speed High-Side Gate Driver | 290mA/600mA | IN* | none | 125ns/105ns | 75ns/35ns | SOIC8(N) |



Product Cross Reference

| TF Semi | A | B |
|----------|--------------------------------|--|
| TF2003M | IRS2003 | IRS2007 |
| TF2005M | IRS2005 | IRS2005 |
| TF2007U | IRS2007 | IRS2003 |
| TF2101M | IRS2101 | IR2101 / FAN7842/FAN7382/TF2101 |
| TF2103M | IRS2103 | IR2103 |
| TF2104M | IRS2104 | IR2104/FAN7080, NCP5104 |
| TF21064M | IRS21064 | IR21064 |
| TF2106M | IRS2106 | IR2106/FAN7382M |
| TF21084 | IRS21084 | IR21084 |
| TF2108 | IRS2108 | IR2108 |
| TF2110M | IRS2110 | IR2110/IR2113/IRS2113/ FAN7392/TF2110 |
| TF2113M | IRS2113 | IR2110/IRS2110/IR2113/ FAN7392/TF2113 |
| TF2136M | IR2136/BS2132F/ STDRIVE601/ | FAN73892/FAN73893/ |
| TF21364M | IR21364 | |
| TF21814M | IRS21814 | IR21814 |
| TF2181M | IRS2181 | IR2181/FAN73901 |
| TF21834M | IRS21834 | IR21834 |
| TF2183M | IRS2183 | IR2183 |
| TF2184M | IRS2184 | IR2184 |
| TF21844M | IRS21844 | IR21844/FAN73932 |
| TF2190M | FAN7390 | FAN7190 |
| TF21904M | FAN7390A | UCC27714/ FAN7391 |
| TF2304M | IRS2304 | IR2304 / L6388 |
| TF2388M | FAN7388 | FAN7888 |
| TF2366M | FAN7388 | FAN7888 |
| TF23892M | FAN73892 | FAN73893 |

A - Pinout Compatible and Functionally Compatible

B - Pinout Compatible and Functionally Similar

Important Phone Numbers:

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