



FC8779

Preliminary

CMOS IC

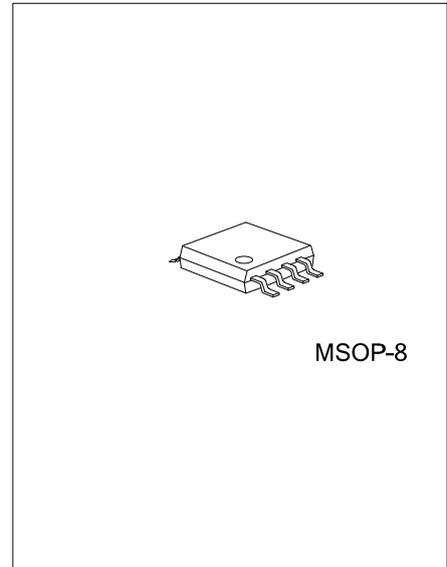
SILICON MONOLITHIC INTEGRATED CIRCUIT

DESCRIPTION

Single-Phase Full-Wave Motor Driver for Fan Motor.

FEATURES

- * Soft switched drive
- * Built-in Lock Protection and Auto Restart Function
- * FG Output
- * Include Hall Bias Circuit
- * Thermal shut-down circuit

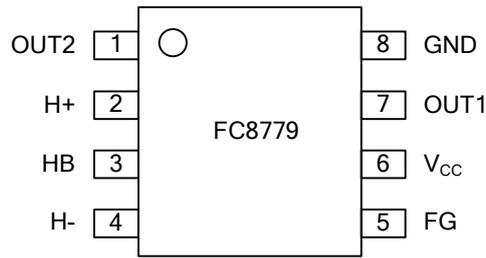


ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
FC8779L-SM1-R	FC8779G-SM1-R	MSOP-8	Tape Reel

<p>FC8779L-SM1-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Lead Free 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) SM1: MSOP-8 (3) L: Lead Free, G: Halogen Free
--	--

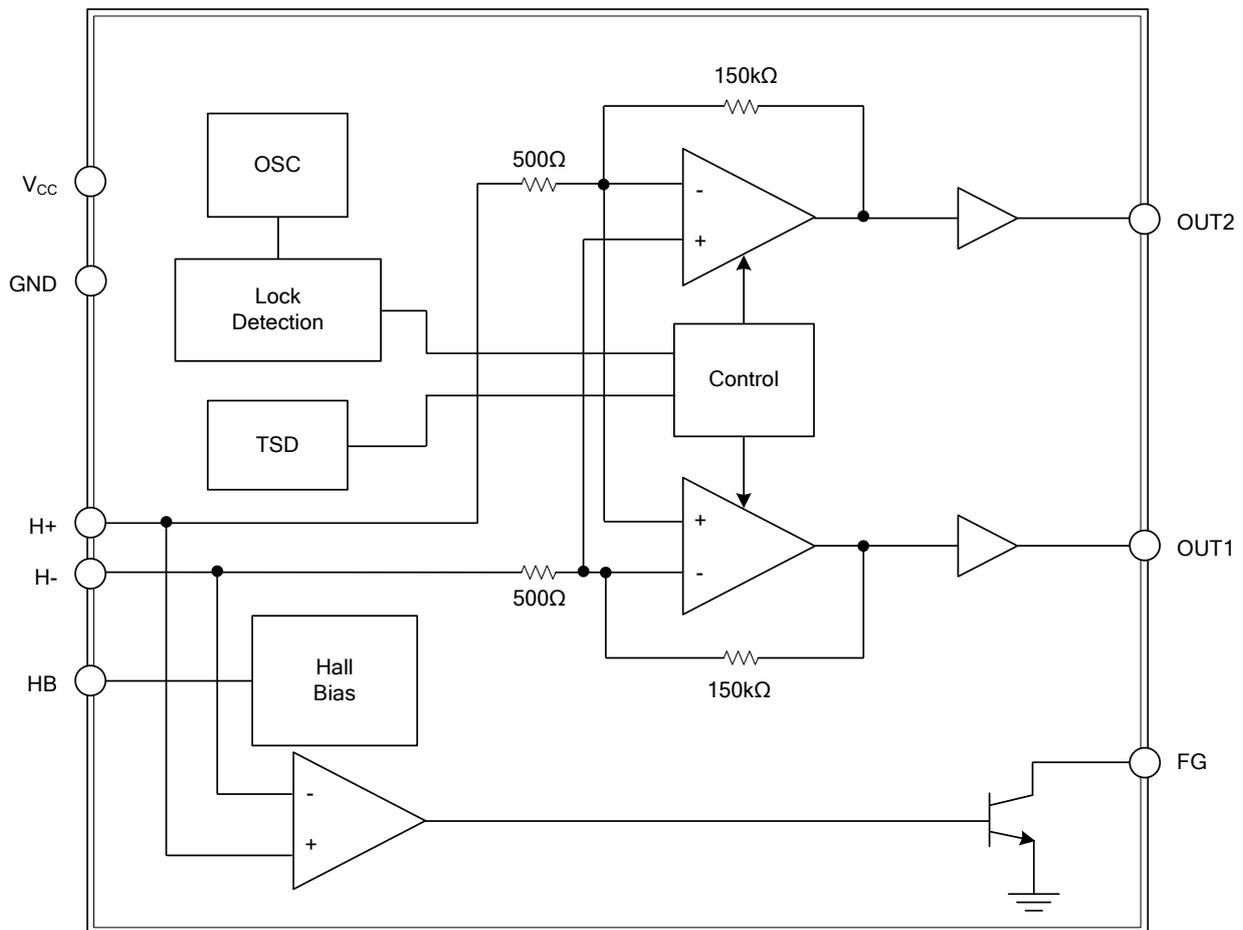
■ PIN CONFIGURATION



■ PIN DESCRIPTION

PIN NO	PIN NAME	DESCRIPTION
1	OUT2	H-bridge output connection.
2	H+	Hall Input+
3	HB	Hall Bias
4	H-	Hall Input-
5	FG	FG signal output terminal
6	V _{CC}	Supply Voltage
7	OUT1	H-bridge output connection.
8	GND	Power GND.

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V_{CC}	7	V
Power Dissipation (Note 2)	P_D	585	mW
Output Current (Note 3)	I_{OMAX}	1000	mA
FG Signal Output	IFG	5	mA
FG Signal Output Voltage	VFG	7	V
Operating Temperature	T_{OPR}	-40~+105	°C
Storage Temperature	T_{STG}	-55~+150	°C
Junction Temperature	T_{JMAX}	150	°C

- Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.
 2. To use at temperature above $T_A=25^{\circ}\text{C}$ reduce $4.68\text{mW}/^{\circ}\text{C}$ (On $70.00\text{mm}\times 1.6\text{mm}$ glass epoxy board).
 3. This value is not to be over P_d , $V_{CC}=4.0\text{V}\sim 6.0\text{V}$ At $V_{CC}=2.2\text{V}\sim 4.0\text{V}$, output current tolerance reduces.

■ OPERATING CONDITIONS

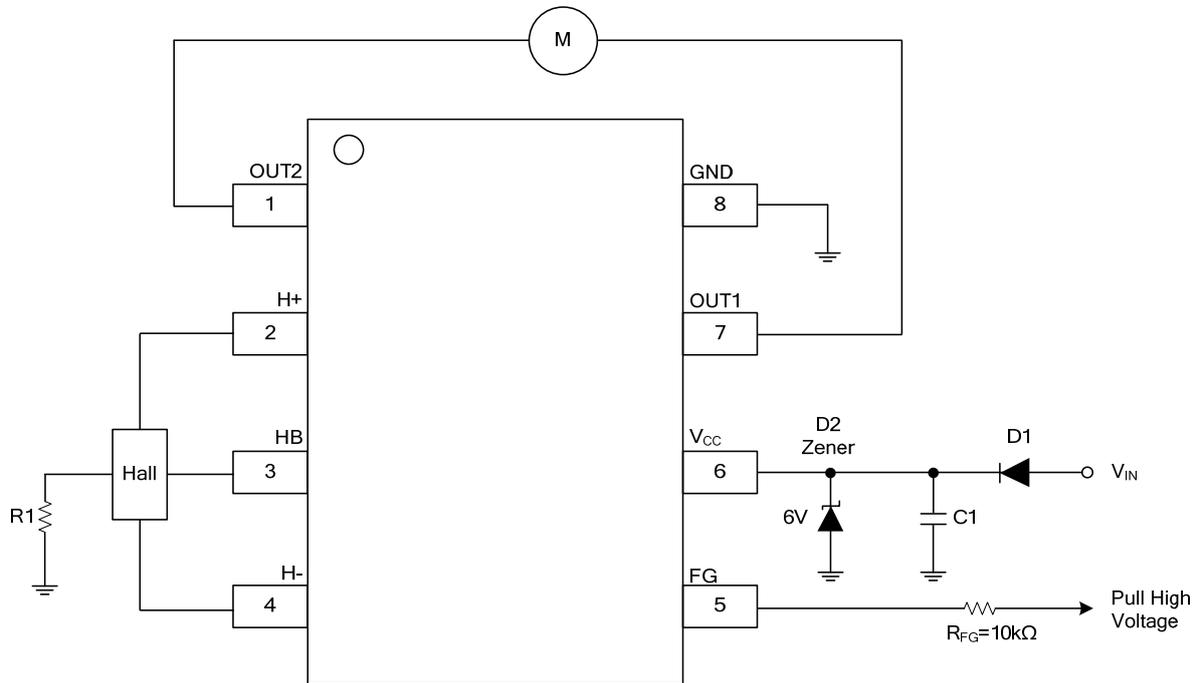
PARAMETER	SYMBOL	RATINGS	UNIT
Operating Supply Voltage Range	V_{CC}	2.2~6.0	V
Hall Input Voltage Range	VH	$0.4\sim V_{CC}-1.1$	V

- Notes: 1. This product is not designed for production against radioactive rays.
 2. This document may be strategic data subject to COCOM regulations.

■ ELECTRICAL CHARACTERISTICS (Unless otherwise specified $T_A=25^{\circ}\text{C}$, $V_{CC}=5\text{V}$)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Current	I_{CC}			5	8	mA
Input Offset Voltage	VHOFS				± 6	mV
Output Voltage	V_O	$I_O=250\text{mA}$ upper and lower total		0.32	0.49	V
Input-Output Gain	GIO		45	48	51	dB
FG Low Voltage	VFGL	IFG=3mA			0.3	V
Input Hysteresis Voltage	VHYS		± 5	± 10	± 15	mV
Lock detection ON Time	TON		0.35	0.50	0.65	sec
Lock Detection OFF Time	TOFF		3.5	5.0	6.5	sec
Hall Bias Voltage	VHB	IHB=-5mA	1.1	1.3	1.5	V

■ TYPICAL APPLICATION CIRCUIT



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.