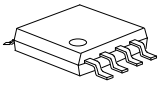
FC8779

Preliminary

CMOS IC

SILICON MONOLITHIC INTEGRATDE CIRCUIT



MSOP-8

■ DESCRIPTION

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

■ FEATURES

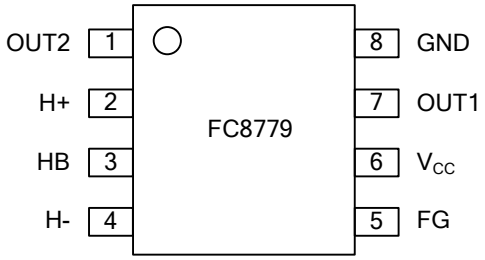
* Soft switched drive
* Built-in Lock Protection and Auto Restart Function
* FG Output
* Include Hall Bias Circuit
* Thermal shut-down circuit

■ ORDERING INFORMATION

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

FC8779L-SM1-R (1)Packing Type (2)Package Type (3)Lead Free	(1) R: Tape Reel (2) SM1: MSOP-8 (3) L: Lead Free, G: Halogen Free

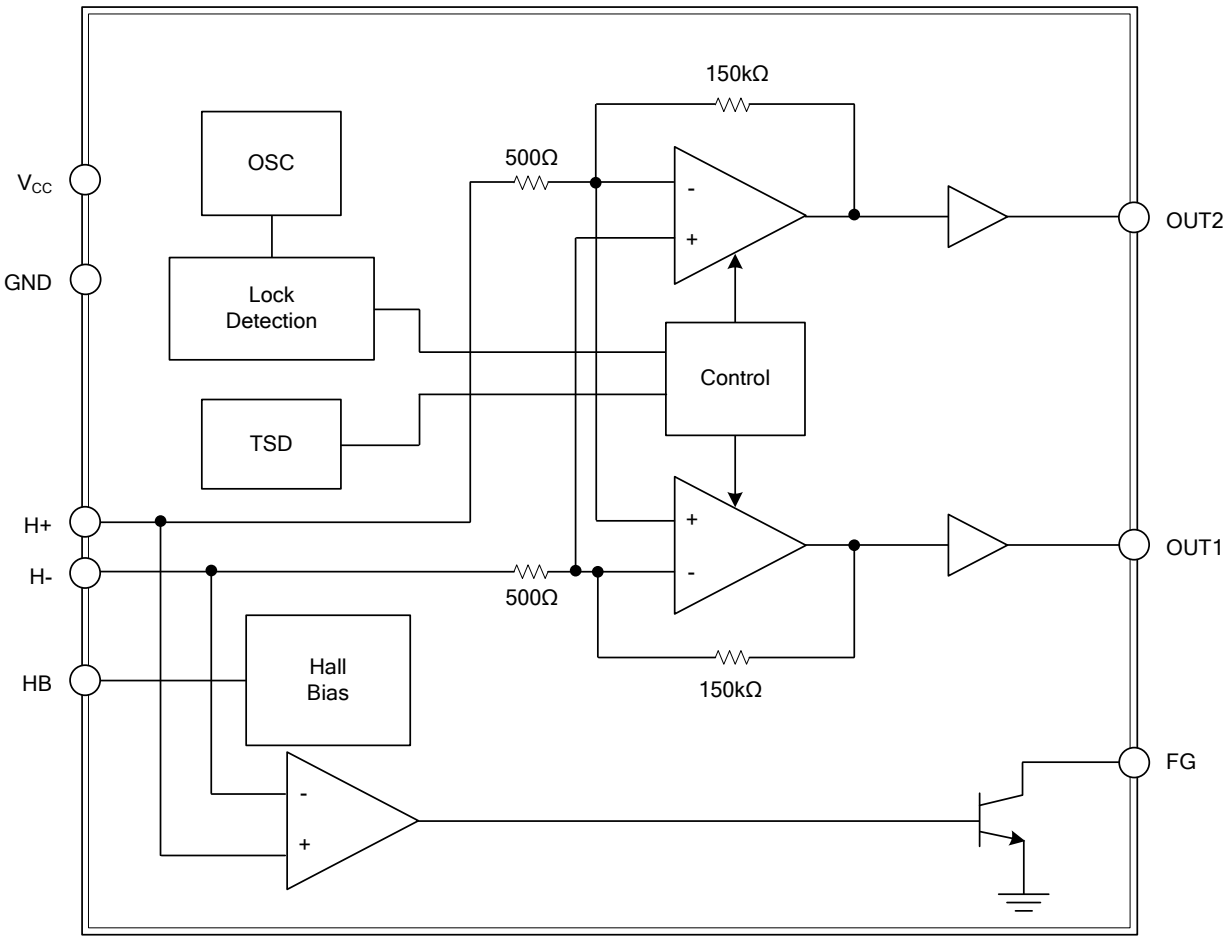
■ PIN CONFIGURATION



■ 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°C reduce 4.68mW/°C (On 70.00mm×1.6mm glass epoxy board).
3. This value is mot to be over Pd, V_{CC}=4.0V~6.0V At V_{CC}=2.2V~4.0V, 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~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°C, V_{CC}=5V)

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=250mA 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