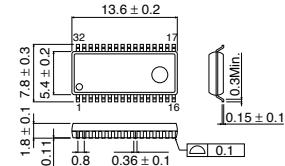


## Three-phase motor pre-driver for LBP BA6680FS

### ● Description

BA6680FS is a three-phase motor pre-driver. PWM driving system is adopted in this IC as well as incorporation of a booster to drive N-channel (upper and lower) MOS FET. Current limit, FG amplifier, FG hysteresis amplifier and charge-pump are incorporated as other functions.

### ● Dimension (Unit : mm)



### ● Features

- 1) Three-phase motor pre-driver
- 2) Upper and lower N-channel MOS FET driving
- 3) PWM driving
- 4) Built-in charge-pump circuit
- 5) Built-in FG amplifier and hysteresis amplifier
- 6) Built-in current limit circuit

**SSOP-A32**

### ● Applications

Paper feed motor for LBP, Motor for OA appliances

### ● Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits		Unit
Power supply voltage	Vcc	36		V
Power dissipation	Pd	950 *		mW
Operating temperature range	Topr	-10 ~ +75		°C
Storage temperature range	Tstg	-40 ~ +150		°C

\*Derating : 7.6mW/°C for operation above Ta=25°C

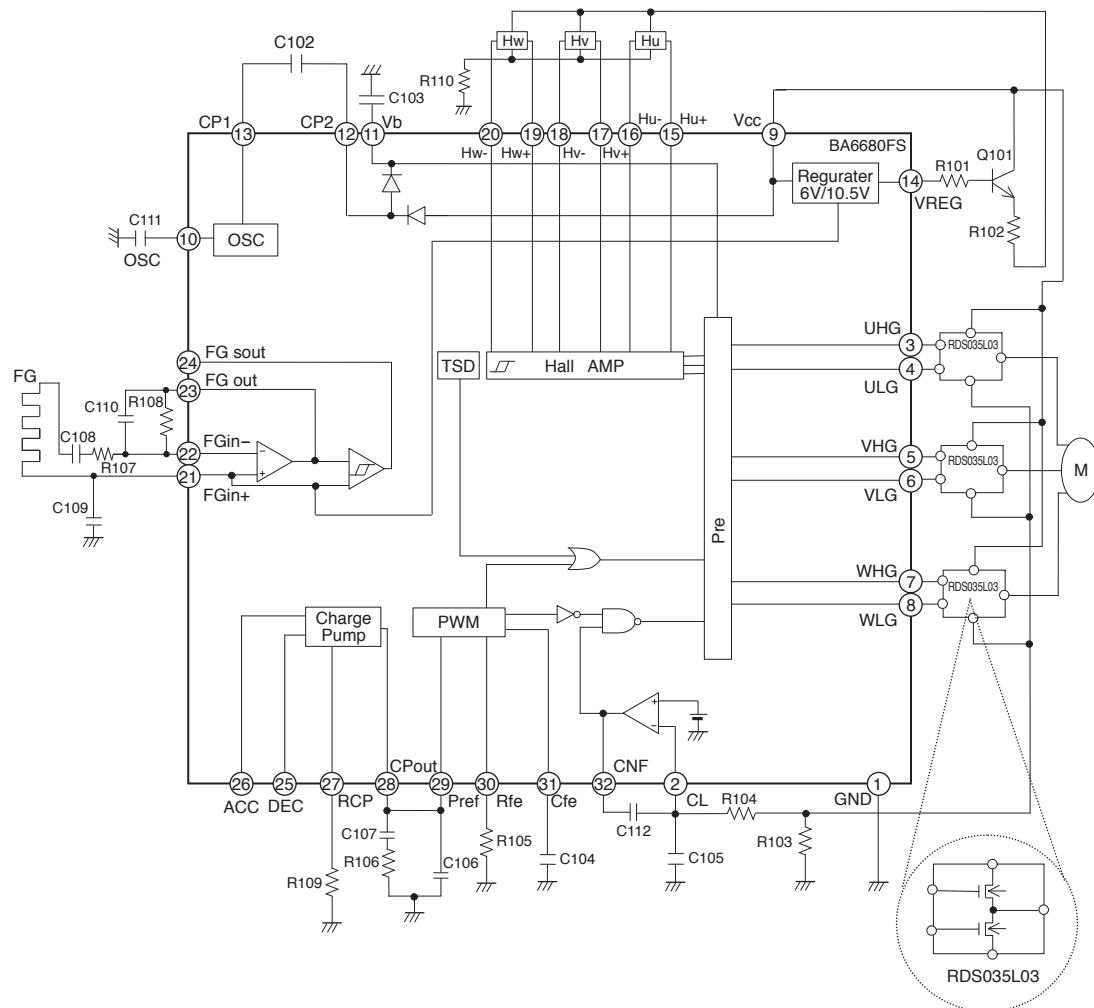
### ● Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Power supply voltage	Vcc	16	-	28	V

● Electrical characteristics (Unless otherwise noted; Ta=25°C, Vcc=25.5V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Circuit current	Icc	11.7	15.7	19.7	mA	
VREG voltage	VREG	5.4	5.9	6.4	V	IVREG=−1mA
Hall input bias current	IHA	−3.0	−0.7	−	μA	
Hall common-mode input voltage range	VHAR	1.0	—	4.9	V	
Boost voltage	VG	Vcc+6	Vcc+7	Vcc+8	V	
Upper gate High voltage	VHG	Vcc+6	Vcc+7	Vcc+8	V	
Lower gate High voltage	VLG	9.5	10.5	11.5	V	
Current detection voltage	VCL	0.342	0.380	0.413	V	
FG amplifier open loop gain	GvFG	45	54	—	dB	f=3kHz

● Application Circuit



## Appendix

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