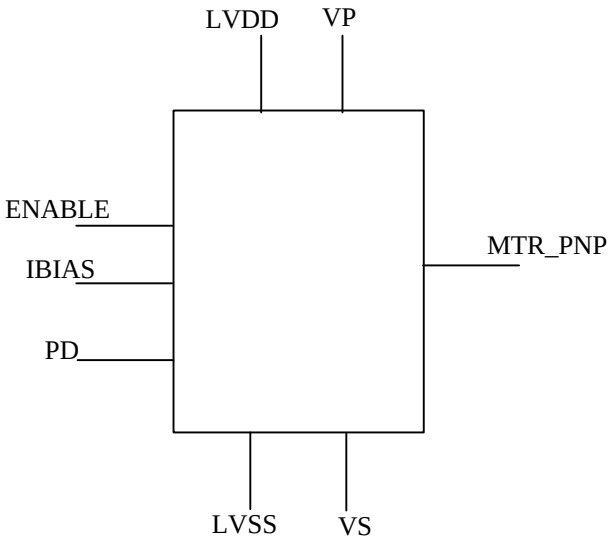
AMERICAN MICROSYSTEMS, INC

OBODN01

June, 1998 Preliminary

AMI 0.8 micron CMOS
CWL Double Poly

MOTOR SINK PAD DRIVER



FEATURES

- 5mA drive capability
- 50nA standby (power-down) current
- Wide power supply voltage range

DESCRIPTION

This is a pad cell that is capable of sinking currents up to 5mA and was designed to be connected to the base of an PNP transistor. The Digital Input and output are standard CMOS Levels.

TRUTH TABLE

(High =Standby Mode)

ENABLE	PD	OUTPUT
0	0	High
0	1	High
1	0	Low
1	1	High

PIN DESCRIPTION

NAME	TYPE	DESCRIPTION
ENABLE	Digital input	Pad enable
IBIAS	Analog input	Current bias (200uA ± 10% Sourcing)
PD	Digital input	Power-down enable
MTR_PNP	Analog output	Sink current output
LVDD	Digital supply	+3.5V supply
VP	Pad supply	+3.5V - +6.5V supply
LVSS	Digital supply	Control circuit ground
VS	Pad supply	Pad ground

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS
VDD	Supply Voltage	3.1		3.6	V
T	Temperature	-40		85	°C
IOL	Output Low	5.18		5.48	mA
VOL	Output Low	2.30		5.89	V *
IPD	Standby Current	3.95		30.49	nA
TRish	Rise Time		1.0		µs
TFall	Fall Time		1.0		µs

*Output was connected to PNP base.