

8bit 10ch D/A converter

BH2223FV/GLU

BH2223FV/GLU is an 8bit D/A converter for electronic adjustment. The 10-channel DC output voltage can be independently controlled by three-wire serial interface from micro-controller. The D/A converter can generate without loss by Rail-to-Rail output within the setting voltage. The built-in power on reset circuit keeps the output state Low after the power is on and prevents the unstable output state.

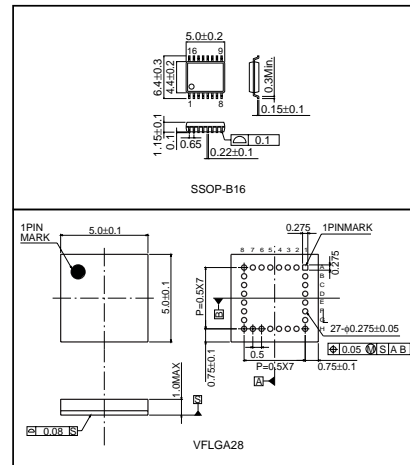
●Applications

The voltage adjustment for DVC, DSC etc.

●Features

- 1) 8bit 10-channel D/A converters adopting R-2R system.
- 2) 3-wire 12-bit serial interface.
- 3) POWER ON RESET circuit.
- 4) The full scale output voltage range : 2.7V to 5.5V.
- 5) SSOPB16/VFLGA28 package.

●External dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	V _{CC}	-0.3 to +7.0	V
Maximum output voltage	V _{IN}	-0.3 to V _{CC}	V
Storage temperature	T _{stg}	-55 to +125	°C
Power dissipation(SSOPB16/VFLGA28)	P _d	400/300*	mW

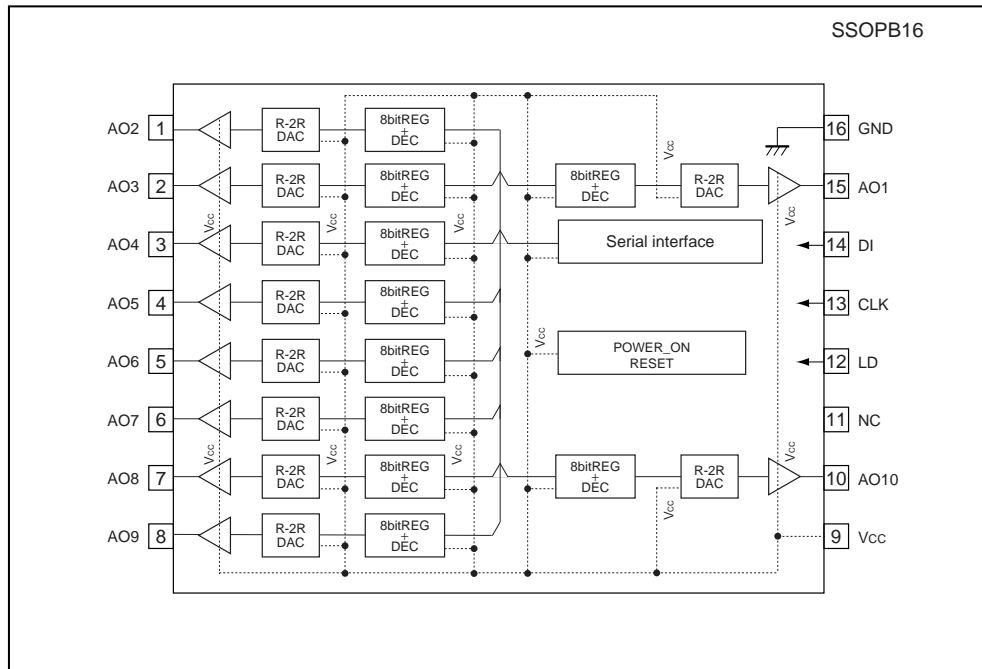
*Reduced by 4mW/3mW for each increase in Ta of 1°C over 25°C.
 ©This product is not designed for protection against radioactive rays.

●Recommended operating conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
V _{CC} supply voltage	V _{CC}	2.7	-	5.5	V
Analog output source current	I _{OL}	-	-	1.0	mA
Analog output sink current	I _{OH}	-	-	1.0	mA
Operating temperature range	T _{opr}	-20	-	85	°C
Clock frequency	FSCLK	-	1.0	-	MHz
Limit load capacitance	CL	-	-	0.1	μF

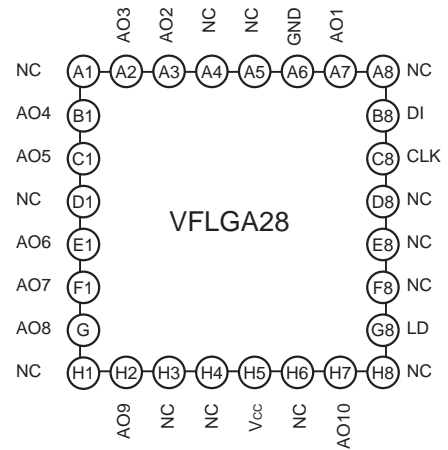
Standard IC

●Block diagram



●Pin descriptions

Pin No.	Pin name	In / Out	Functions	
1	A3	AO2	OUT	Analog output pins
2	A2	AO3	OUT	
-	A1	NC	-	NC
3	B1	AO4	OUT	Analog output pins
4	C1	AO5	OUT	
-	D1	NC	-	NC
5	E1	AO6	OUT	Analog output pins
6	F1	AO7	OUT	
7	G1	AO8	OUT	
-	H1	NC	-	NC
8	H2	AO9	OUT	Analog output pins
-	H3	NC	-	
-	H4	NC	-	
9	H5	Vcc	-	Power supply pin
-	H6	NC	-	NC
10	H7	AO10	OUT	Analog output pins
11	H8	NC	-	NC
12	G8	LD	IN	Serial Load input pin
-	F8	NC	-	NC
-	E8	NC	-	
-	D8	NC	-	
13	C8	CLK	IN	Serial Clock input pin
14	B8	DI	IN	Serial Data input pin
-	A8	NC	-	NC
15	A7	AO1	OUT	Analog output pins
16	A6	GND	-	Common GND pin
-	A5	NC	-	NC
-	A4	NC	-	



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