

## DAC Output of OTP NY5PxxxJ Series ICs Application Notice

**Description:** NY5PxxJ series ICs don't support the overall volume control function for DAC output. The DAC output of the same NY5 series, e.g., NY5\_ICE, NY5\_FDB-xx, NY5\_EV\_Board, NY5AxxxB, NY5BxxxB, NY5CxxxC and NY5PxxxA supports the overall volume control function.

**Reason:** As shown below. Because the DAC module of NY5PxxxJ series has no overall volume control hardware, the Audio output of VOL register is invalid, and the DAC only outputs the maximum volume. The value is fixed as 0xF same to the initial value.

Addr	Name	R/W	Bit	Data	Description	Initial	Wake-up
0	VOL	R/W	[3:0]		16 steps volume control level	0xF	U

**Solution:**

1. If user needs to adjust the overall volume for NY5PxxxJ, please use the PWM output.
2. The user can still use the DAC output of NY5PxxxJ if no need for overall volume adjustment.
3. If it is required to adjust overall volume control of NY5PxxxJ DAC output, please use the external resistor for controlling the overall volume. Or use NY6P/NY7P IC series of Nyquest instead.