Nyquest

NY5 Series — 4-bit MCU with 4-ch Speech/Melody

2024/5/31

P/N	Sec (4-bit 6kHz)	Sec (4-bit 8kHz)	Voice Algorithm	MOQ (K pcs)	MFQ (K pcs)	Operating Voltage	ROM	SRAM	I/O	Shared OSC Pad	Open Drain	IR	VC 16-level	QIO	LCO	Fast Clock	Slow Mode	Halt Mode	Int. Rosc	Ext. Rosc	Voice	Melody	PWM/DAC Option	Large PWM	PWM	DAC	Pad Count	NY5_FDB
NY5A003C	3.3	2.5	4/5-bit	35.0K	175K	2.0~5.5V	12K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A005C	5.0	3.8	4/5-bit	35.0K	175K	2.0~5.5V	16K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A008C	8.3	6.3	4/5-bit	32.5K	163K	2.0~5.5V	24K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A011C	11.7	8.8	4/5-bit	32.5K	163K	2.0~5.5V	32K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A018C	18.3	13.8	4/5-bit	28.5K	143K	2.0~5.5V	48K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A025C	25.0	18.8	4/5-bit	28.5K	143K	2.0~5.5V	64K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A035C	35.0	26.3	4/5-bit	24.0K	120K	2.0~5.5V	88K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A045C	45.0	33.8	4/5-bit	24.0K	120K	2.0~5.5V	112K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A055C	55.0	41.3	4/5-bit	21.0K	105K	2.0~5.5V	136K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A065C	65.0	48.8	4/5-bit	21.0K	105K	2.0~5.5V	160K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A075C	75.0	56.3	4/5-bit	18.2K	91K	2.0~5.5V	184K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5A085C	85.0	63.8	4/5-bit	18.2K	91K	2.0~5.5V	208K x 10	224 x 4	8	v	v	v	v	8	8	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	14	-04 -08 -16 -32
NY5B005C	5.0	3.8	4/5-bit	29.2K	146K	2.0~5.5V	16K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B008C	8.3	6.3	4/5-bit	29.2K	146K	2.0~5.5V	24K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B011C	11.7	8.8	4/5-bit	29.2K	146K	2.0~5.5V	32K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B018C	18.3	13.8	4/5-bit	26.0K	130K	2.0~5.5V	48K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B025C	25.0	18.8	4/5-bit	26.0K	130K	2.0~5.5V	64K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B035C	35.0	26.3	4/5-bit	22.0K	110K	2.0~5.5V	88K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B046C	45.0	33.8	4/5-bit	22.0K	110K	2.0~5.5V	112K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B055C	55.0	41.3	4/5-bit	19.3K	97K	2.0~5.5V	136K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B065C	65.0	48.8	4/5-bit	19.3K	97K	2.0~5.5V	160K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B075C	75.0	56.3	4/5-bit	17.0K	85K	2.0~5.5V	184K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B085C	85.0	63.8	4/5-bit	17.0K	85K	2.0~5.5V	208K x 10	224 x 4	15	v	v	v	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B112C	111.7	83.8	4/5-bit	13.4K	67K	2.0~5.5V	272K x 10	224 x 4	15	v	v	-	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B132C	131.7	98.8	4/5-bit	13.4K	67K	2.0~5.5V	320K x 10	224 x 4	15	v	v	-	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B158C	158.3	118.8	4/5-bit	12.0K	60K	2.0~5.5V	384K x 10	224 x 4	15	v	v	-	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5B185C	185.0	138.8	4/5-bit	10.8K	54K	2.0~5.5V	448K x 10	224 x 4	15	v	v	-	v	15	15	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	21	-04 -08 -16 -32
NY5C112C	111.7	83.8	4/5-bit	11.0	55K	2.0~5.5V	272K x 10	224 x 4	20	v	v	v	v	20	20	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	29	-08 -16 -32
NY5C132C	131.7	98.8	4/5-bit	11.0K	55K	2.0~5.5V	320K x 10	224 x 4	20	v	v	v	v	20	20	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	29	-08 -16 -32
NY5C158C	158.3	118.8	4/5-bit	9.8K	49K	2.0~5.5V	384K x 10	224 x 4	20	v	v	v	v	20	20	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	29	-08 -16 -32
NY5C185C	185.0	138.8	4/5-bit	9.0K	45K	2.0~5.5V	448K x 10	224 x 4	20	v	v	v	v	20	20	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	29	-08 -16 -32
NY5C225C	225.0	168.8	4/5-bit	7.1	36K	2.0~5.5V	544K x 10	224 x 4	20	v	v	v	v	20	20	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	29	-16 -32
NY5C265C	265.0	198.8	4/5-bit	7.1K	36K	2.0~5.5V	640K x 10	224 x 4	20	v	v	v	v	20	20	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	29	-16 -32
NY5C305C	305.0	228.8	4/5-bit	5.9K	30K	2.0~5.5V	736K x 10	224 x 4	20	v	v	v	v	20	20	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	29	-16 -32
NY5C345C	345.0	258.8	4/5-bit	5.9K	30K	2.0~5.5V	832K x 10	224 x 4	20	v	v	v	v	20	20	1M/2MHz	v	v	+/- 1%	v	4/0	0/4	Auto/Register	v	9-bit	10-bit	29	-16 -32

Remarks: 1. VC 16-level: 16-level analog volume control for both PWM and DAC. 2. QIO: Quick-IO output signal. 3. LCO: Large current output. 4. Slow Clock: lower operating current at slow clock mode.