DRIVEN BY INNOVATION

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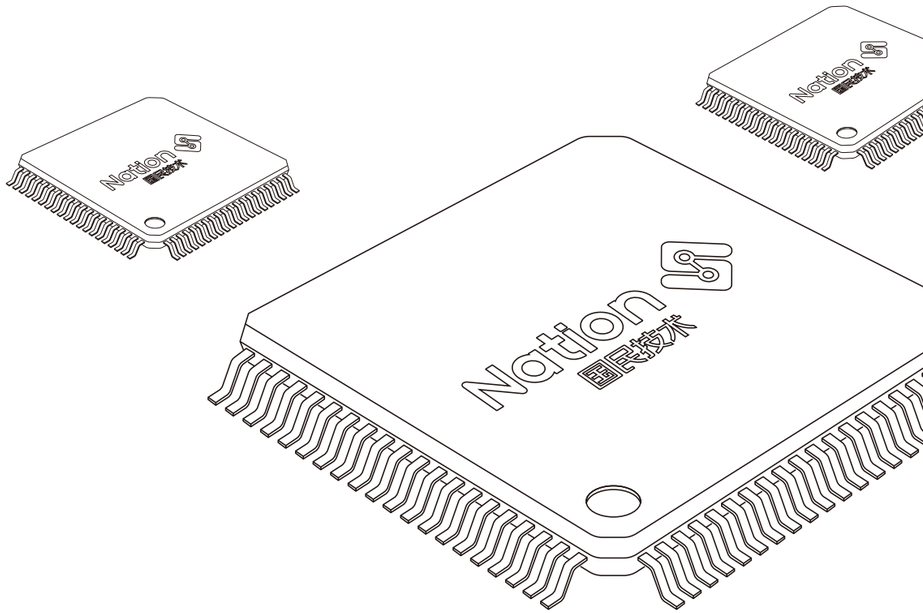
Nation 国民技术

Stock Code:300077

PRODUCT SELECTION GUIDE

General MCU Security IC Wireless RF Power IC

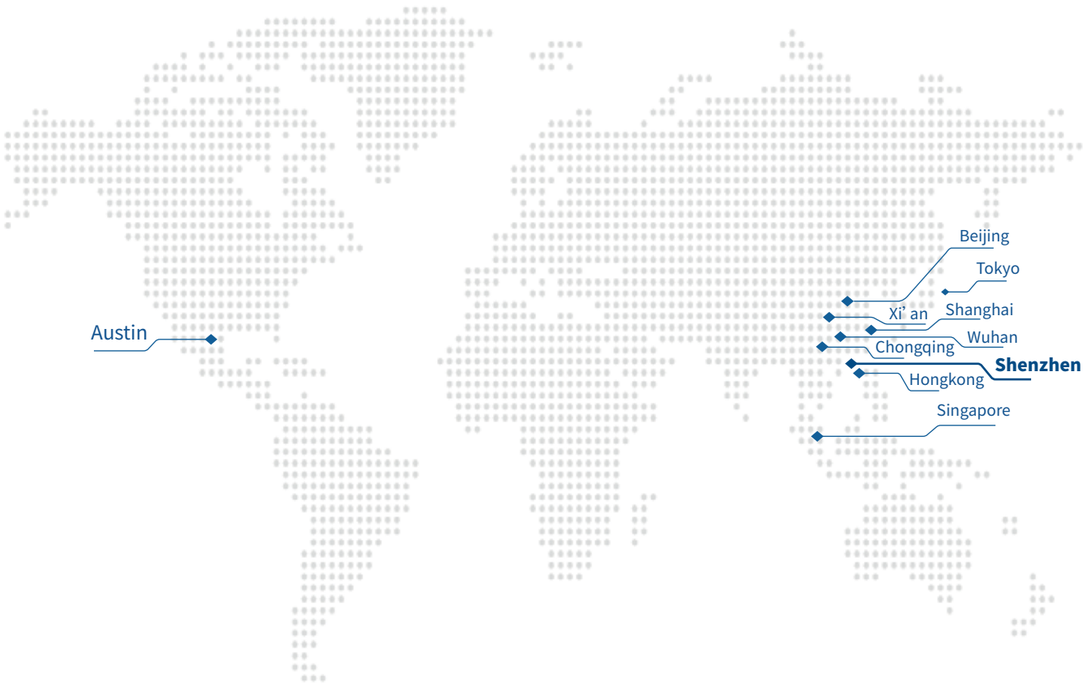


Nations Technologies Inc.

Mar 2024

Nations is committed to providing IC and solutions for people,

Making Lives Safer, Simpler and Smarter



Established in 2000

Listed in 2010
Stock Code：300077

Technology Field
Security, SoC, RF, Power

Qualifications and Honors

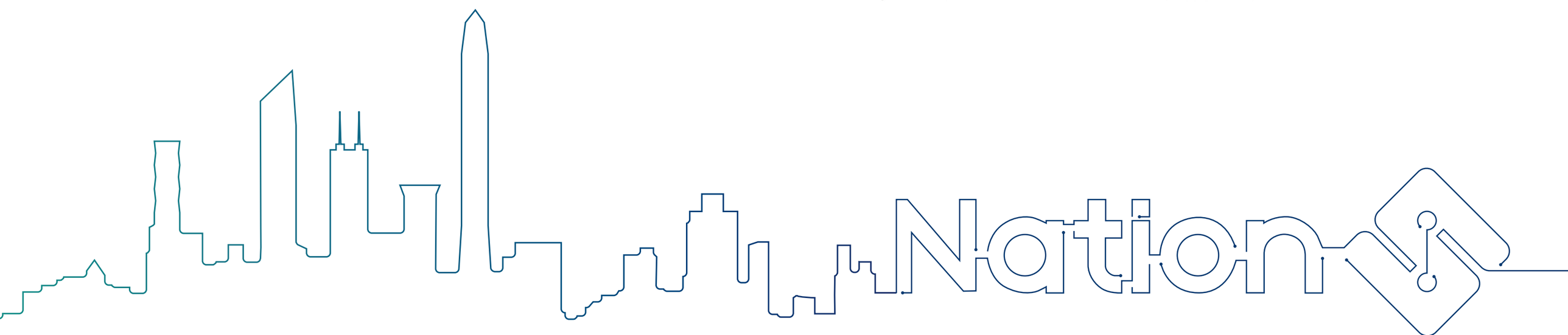
- Over 20+ years cooperation with ARM
- Over 20+ years cooperation with TSMC
- Long-term cooperation with Microsoft, Intel

In-house Laboratories

- 1st independent enterprise lab of security IC attack and defense technology in China
- 1st domestic electrochemical BMS laboratory in China' s IC industry
- Professional motor control lab
- Obtained various high security level qualification certifications (domestic and international)

Service Capability

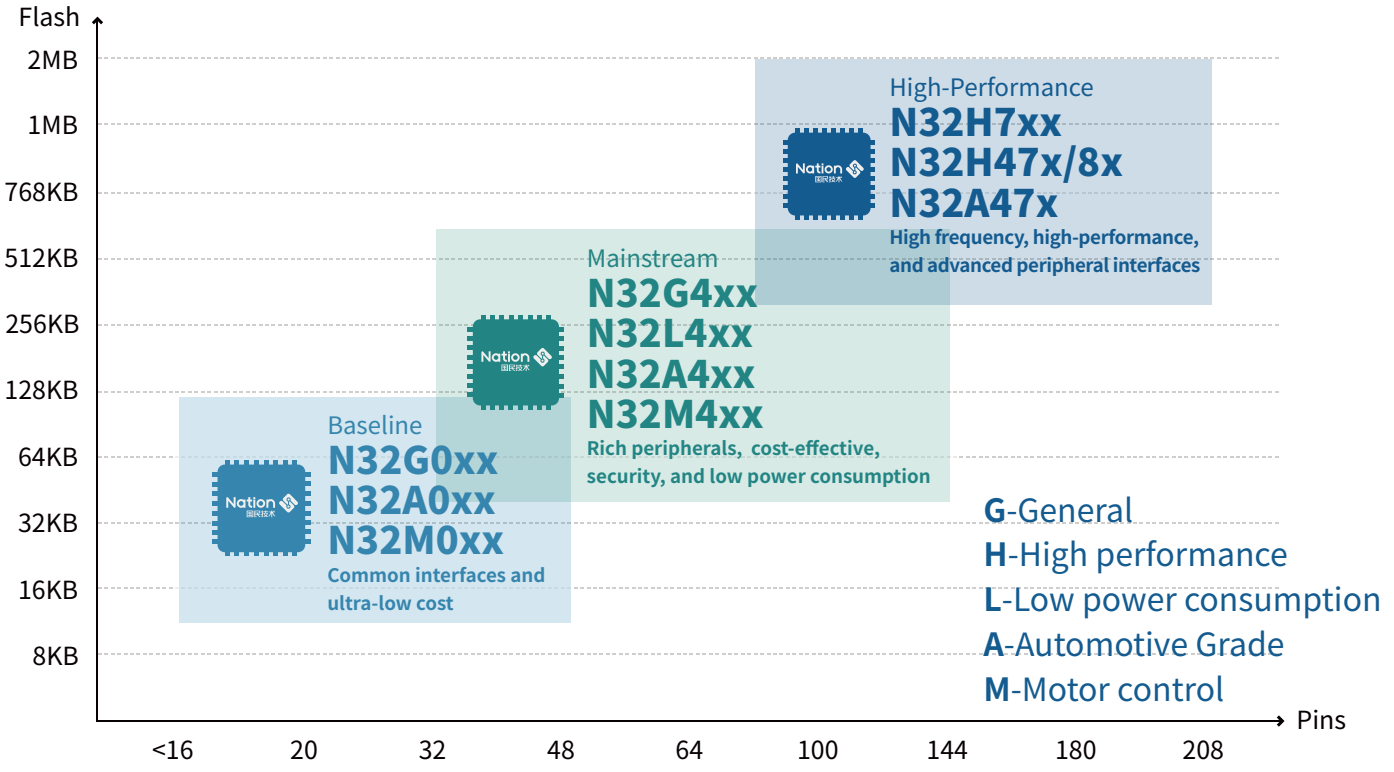
- International R&D team
- Localized technical service team
- Online and offline service
- Long-term cooperations with world-class foundries/supply chain partners



Marketing Strategy of MCU

Roadmap

Sustainable innovation, providing full-scenario, wide-coverage, high-performance, security and reliability MCUs.



MCU Part Number Suffixes

N 32 G 4 52 R B L 7

Company Prefix
N:Nations Technologies Inc.

Processor(Bit)
32 = 32bit

Product Family
G=General
H=High-Performance
L=Low power consumption
WB=Wireless Bluetooth
M=Motor control
A=Automotive grade

Processor Core
0=ARM Cortex-M0
4=ARM Cortex-M4F
7=ARM Cortex-M7F

Product Series
x0,03=Value
x2,01=Mainstream
x3/5=High-performance
x6=LCD series
x7=Interconnect
FR=Fingerprint identification series
17=SIP(4*OPAMP+250V 6N Predrive)
18=SIP(2*OPAMP+LDO)

Pin Count(pins)
F=20 pin
P=25 pin
G=28 pin
K=32 pin
T=36 pin
H=40 pin
C=48 pin
R=64 pin
M=80 pin
L=88 pin
V=100 pin
Q=128 pin

Package
L=LQFP
T=TQFP
Q=QFN
W=WLCSP
S=TSSOP
U=UFQFPN

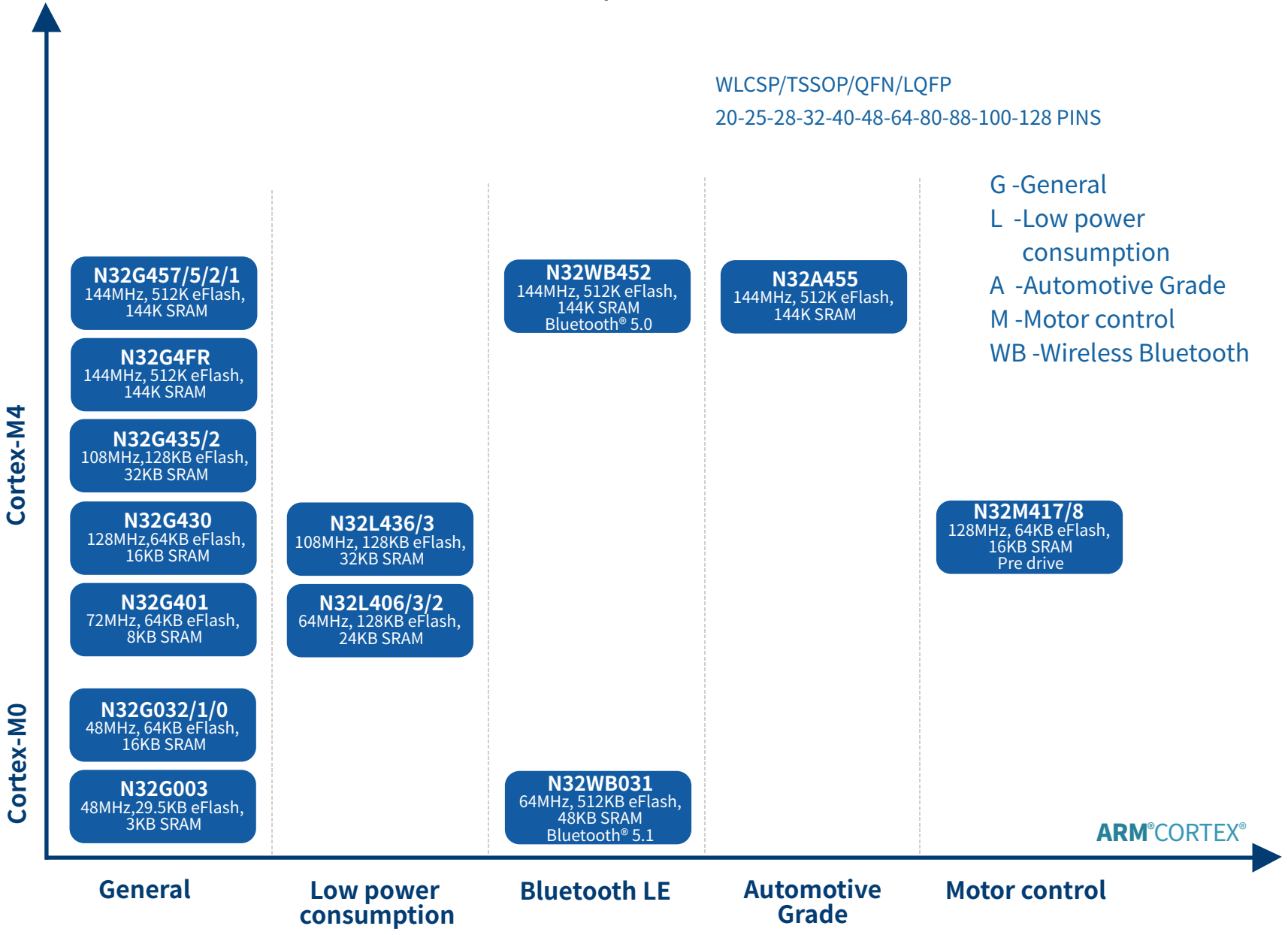
Flash Size
4=16KB Flash
5=29.5KB Flash
6=32KB Flash
8=64KB Flash
B=128KB Flash
C=256KB Flash
E=512KB Flash
G=1024KB Flash
I=2048KB Flash

Temperature Range
6=-40~+85°C
7=-40~+105°C
8=-40~+125°C

Marketing Strategy of MCU

Product matrix

Provide 23 series of 100+MCUs, including general-purpose, low-power, Bluetooth, vehicle specifications, and electronic control



General MCU

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	BEEPER	Connectivity									DMA/Channels	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package	SPQ(PCS)
								Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels						USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO							
N32G457	N32G457RCL7	Arm® Cortex®-M4F	144	256	144	51	1.8V~3.6V/-40~+105°C	8	1	24	12	4x12bit	22	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	1	1	DES/3DES、AES、SHA1/SHA224/SHA256、SM1、SM3、SM4、SM7、MD5、CRC16/CRC32、TRNG	LQFP64 (10mmx10mm)	160/Tray
	N32G457REL7		144	512	144	51		8	1	24	12	4x12bit	22	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	1	1		LQFP64 (10mmx10mm)	160/Tray
	N32G457MCL7		144	256	144	65		8	1	24	12	4x12bit	33	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	1	1		LQFP80	119/Tray
	N32G457MEL7		144	512	144	65		8	1	24	12	4x12bit	33	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	1	1		LQFP80	119/Tray
	N32G457VCL7		144	256	144	80		8	1	24	12	4x12bit	38	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	1	1		LQFP100	90/Tray
	N32G457VEL7		144	512	144	80		8	1	24	12	4x12bit	38	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	1	1		LQFP100	90/Tray
	N32G457QEL7		144	512	144	97		8	1	24	12	4x12bit	40	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	1	1		LQFP128	90/Tray
N32G455	N32G455CBL7		144	128	80	37		8	1	23	6	4x12bit	16	2x12bit	4	5	–	–	3	3	–	3/2	1(1)	3	1	2	–	2/16	–	–	–		LQFP48	250/Tray
	N32G455CCL7		144	256	144	37		8	1	23	6	4x12bit	16	2x12bit	4	5	–	–	3	3	–	3/2	1(1)	3	1	2	–	2/16	–	–	–		LQFP48	250/Tray
	N32G455CEQ7		144	512	144	42		8	1	23	6	4x12bit	16	2x12bit	4	7	–	–	3	4	–	3/2	1	3	–	2	1	2/16	–	–	–		QFN48	490/Tray
	N32G455CEL7		144	512	144	37		8	1	23	6	4x12bit	16	2x12bit	4	7	–	–	3	4	–	3/2	1	3	–	2	1	2/16	–	–	–		LQFP48	250/Tray
	N32G455RBL7		144	128	80	51		8	1	24	12	4x12bit	22	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G455RCL7		144	256	144	51		8	1	24	12	4x12bit	22	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G455REL7		144	512	144	51		8	1	24	12	4x12bit	22	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G455MBL7		144	128	80	65		8	1	24	12	4x12bit	33	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80	119/Tray
	N32G455MCL7		144	256	144	65		8	1	24	12	4x12bit	33	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80	119/Tray
	N32G455MEL7		144	512	144	65		8	1	24	12	4x12bit	33	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80	119/Tray
	N32G455VBL7		144	128	80	80		8	1	24	12	4x12bit	38	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100	90/Tray
	N32G455VCL7		144	256	144	80		8	1	24	12	4x12bit	38	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100	90/Tray
	N32G455VEL7		144	512	144	80		8	1	24	12	4x12bit	38	2x12bit	4	7	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100	90/Tray
N32G452	N32G452CBL7		144	128	80	37		8	1	23	6	2x12bit	10	2x12bit	–	–	–	–	3	3	–	3/2	1(1)	3	1	2	–	2/16	–	–	–		LQFP48	250/Tray
	N32G452CCL7		144	256	144	37		8	1	23	6	2x12bit	10	2x12bit	–	–	–	–	3	3	–	3/2	1(1)	3	1	2	–	2/16	–	–	–		LQFP48	250/Tray
	N32G452CEL7		144	512	144	37		8	1	23	6	2x12bit	10	2x12bit	–	–	–	–	3	3	–	3/2	1(1)	3	1	2	–	2/16	–	–	–		LQFP48	250/Tray
	N32G452RBL7		144	128	80	51		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G452RCL7		144	256	144	51		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G452REL7		144	512	144	51		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G452MBL7		144	128	80	65		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80	119/Tray
	N32G452MCL7		144	256	144	65		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80	119/Tray
	N32G452MEL7		144	512	144	65		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80	119/Tray
	N32G452VCL7		144	256	144	80		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100	90/Tray
	N32G452VEL7		144	512	144	80		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100	90/Tray
	N32G452QCL7		144	256	144	97		8	1	24	12	2x12bit	18	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP128	90/Tray
	N32G452QEL7		144	512	144	97		8	1	24	12	2x12bit	18	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP128	90/Tray
N32G451	N32G451CBL7		144	128	48	37		8	1	23	6	3x12bit	13	2x12bit	–	–	–	–	3	3	–	3/2	–	3	1	1	–	2/16	–	–	–		LQFP48	250/Tray
	N32G451CCL7		144	256	96	37		8	1	23	6	3x12bit	13	2x12bit	–	–	–	–	3	3	–	3/2	–	3	1	1	–	2/16	–	–	–		LQFP48	250/Tray
	N32G451CEL7		144	512	96	37		8	1	23	6	3x12bit	13	2x12bit	–	–	–	–	3	3	–	3/2	–	3	1	1	–	2/16	–	–	–		LQFP48	250/Tray
	N32G451RBL7		144	128	48	51		8	1	24	12	3x12bit	19	2x12bit	–	–	–	–	3	4	–	3/2	–	4	1	1	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G451RCL7		144	256	96	51		8	1	24	12	3x12bit	19	2x12bit	–	–	–	–	3	4	–	3/2	–	4	1	1	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G451REL7		144	512	96	51		8	1	24	12	3x12bit	19	2x12bit	–	–	–	–	3	4	–	3/2	–	4	1	1	1	2/16	–	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32G451VCL7		144	256	96	80		8	1	24	12	3x12bit	31	2x12bit	–	–	–	–	3	4	–	3/2	–	4	1	1	1	2/16	–	–	–		LQFP100	90/Tray
	N32G451VEL7		144	512	96	80		8	1	24	12	3x12bit	31	2x12bit	–	–	–	–	3	4	–	3/2	–	4	1	1	1	2/16	–	–	–		LQFP100	90/Tray

Note: "-" means not support ; (1) means only single wire

General MCU

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	BEEPER	Connectivity									DMA/Channels	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package	SPQ(PCS)
								Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels						USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO							
N32G4FR	N32G4FRKCQ7	Arm® Cortex®-M4F	144	256	144	24	1.8V~3.6V/-40~+105°C	8	1	10	6	2x12bit	7	2x12bit	–	–	–	–	1	3	–	2/1	1	3	1	1	–	2/16	–	–	–	DES/3DES, AES, SHA1/SHA224/SHA256, SM1, SM3, SM4, SM7, MD5, CRC16/CRC32, TRNG	QFN32	490/Tray
	N32G4FRKEQ7		144	512	144	24		8	1	10	6	2x12bit	7	2x12bit	–	–	–	–	1	3	–	2/1	1	3	1	1	–	2/16	–	–	–		QFN32	490/Tray
	N32G4FRHCQ7		144	256	144	32		8	1	12	6	2x12bit	11	2x12bit	–	–	–	–	2	4	–	3/2	1	4	1	2	–	2/16	–	–	1		QFN40	490/Tray
	N32G4FRHEQ7		144	512	144	32		8	1	12	6	2x12bit	11	2x12bit	–	–	–	–	2	4	–	3/2	1	4	1	2	–	2/16	–	–	1		QFN40	490/Tray
	N32G4FRREL7		144	512	144	51		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	1		LQFP64 (10mmx10mm)	160/Tray
	N32G4FRMEL7		144	512	144	65		8	1	24	12	2x12bit	16	2x12bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	1		LQFP80	119/Tray
N32G435	N32G435G8Q7		108	64	16	24		10	1	16	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	1/1	–	2	–	–	–	1/8	–	–	–		QFN28	490/Tray
	N32G435GBQ7		108	128	32	24		10	1	16	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	1/1	–	2	–	–	–	1/8	–	–	–		QFN28	490/Tray
	N32G435K8L7		108	64	16	26		10	1	17	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32	250/Tray
	N32G435KBL7		108	128	32	26		10	1	17	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32	250/Tray
	N32G435C8L7		108	64	24	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP48	250/Tray
	N32G435CBL7		108	128	32	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP48	250/Tray
	N32G435R8L7		108	64	24	52		10	1	28	12	1x12bit	16	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64 10mmx10mm	160/Tray
	N32G435RBL7		108	128	32	52		10	1	28	12	1x12bit	16	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64 10mmx10mm	160/Tray
	N32G435RBL7-1		108	128	32	52		10	1	28	12	1x12bit	16	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64 7mmx7mm	250/Tray
N32G432	N32G432K8L7		108	64	24	26		10	1	17	6	1x12bit	10	1x12bit	–	–	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32	250/Tray
	N32G432KBL7		108	128	32	26		10	1	17	6	1x12bit	10	1x12bit	–	–	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32	250/Tray
	N32G432C8L7		108	64	24	38		10	1	24	6	1x12bit	10	1x12bit	–	–	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP48	250/Tray
	N32G432CBL7		108	128	32	38		10	1	24	6	1x12bit	10	1x12bit	–	–	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP48	250/Tray
	N32G432R8L7		108	64	24	52		10	1	28	6	1x12bit	16	1x12bit	–	–	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64 10mmx10mm	160/Tray
	N32G432RBL7		108	128	32	52		10	1	28	6	1x12bit	16	1x12bit	–	–	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64 10mmx10mm	160/Tray

Note: "-" means not support

General MCU

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	BEEPER	Connectivity									DMA/Channels	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package	SPQ(PCS)
								Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels						USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I^2S	QSPI	I^2C	USB Device	CAN	SDIO							
N32G430	N32G430F6Q7	Arm® Cortex®-M4F	128	32	16	16	2.4V~3.6V/-40~+105°C	8	1*	11	10	1x12bit	7	–	–	3	–	1	2*	1	–	2/2	–	2	–	1	–	1/8	–	–	–	CRC16/CRC32	UQFN20	490/Tray
	N32G430F8Q7		128	64	16	16		8	1*	11	10	1x12bit	7	–	–	3	–	1	2*	1	–	2/2	–	2	–	1	–	1/8	–	–	–		UQFN20	490/Tray
	N32G430G6Q7		128	32	16	24		8	1*	19	14	1x12bit	10	–	–	3	–	1	2*	2	–	2/2	–	2	–	1	–	1/8	–	–	–		QFN28	490/Tray
	N32G430G8Q7		128	64	16	24		8	1*	19	14	1x12bit	10	–	–	3	–	1	2*	2	–	2/2	–	2	–	1	–	1/8	–	–	–		QFN28	490/Tray
	N32G430K6Q7		128	32	16	26		8	1*	20	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		QFN32	490/Tray
	N32G430K8Q7		128	64	16	26		8	1*	20	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		QFN32	490/Tray
	N32G430C6Q7		128	32	16	40		8	1	24	14	1x12bit	16	–	–	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		QFN48	490/Tray
	N32G430C8Q7		128	64	16	40		8	1	24	14	1x12bit	16	–	–	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		QFN48	490/Tray
	N32G430F6S7		128	32	16	16		8	1*	11	10	1x12bit	9	–	–	3	–	1	2*	1	–	2/2	–	2	–	1	–	1/8	–	–	–		TSSOP20	70/Tube
	N32G430F8S7		128	64	16	16		8	1*	11	10	1x12bit	9	–	–	3	–	1	2*	1	–	2/2	–	2	–	1	–	1/8	–	–	–		TSSOP20	70/Tube
	N32G430F6S7-1		128	32	16	16		8	1*	11	10	1x12bit	9	–	–	3	–	1	2*	1	–	2/2	–	2	–	1	–	1/8	–	–	–		TSSOP20	70/Tube
	N32G430F8S7-1		128	64	16	16		8	1*	11	10	1x12bit	9	–	–	3	–	1	2*	1	–	2/2	–	2	–	1	–	1/8	–	–	–		TSSOP20	70/Tube
	N32G430K6L7		128	32	16	26		8	1*	20	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		LQFP32	250/Tray
	N32G430K8L7		128	64	16	26		8	1*	20	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		LQFP32	250/Tray
	N32G430C6L7		128	32	16	40		8	1	24	14	1x12bit	16	–	–	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		LQFP48	250/Tray
	N32G430C8L7		128	64	16	40		8	1	24	14	1x12bit	16	–	–	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		LQFP48	250/Tray
N32G401	N32G401F6Q7		72	32	8	16		8	1	11	10	1x12bit	7	–	–	3	–	1	2	1	–	2/2	–	2	–	–	–	1/8	–	–	–		UQFN20	490/Tray
	N32G401F8Q7		72	64	8	16		8	1	11	10	1x12bit	7	–	–	3	–	1	2	1	–	2/2	–	2	–	–	–	1/8	–	–	–		UQFN20	490/Tray
	N32G401G6Q7		72	32	8	24		8	1	19	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		QFN28	490/Tray
	N32G401G8Q7		72	64	8	24		8	1	19	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		QFN28	490/Tray
	N32G401K6Q7		72	32	8	26		8	1	20	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		QFN32	490/Tray
	N32G401K8Q7		72	64	8	26		8	1	20	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		QFN32	490/Tray
	N32G401C6Q7		72	32	8	40		8	1	24	14	1x12bit	16	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		QFN48	490/Tray
	N32G401C8Q7		72	64	8	40		8	1	24	14	1x12bit	16	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		QFN48	490/Tray
	N32G401F6S7-1		72	32	8	16		8	1	11	10	1x12bit	9	–	–	–	–	1	2	1	–	2/2	–	2	–	–	–	1/8	–	–	–		TSSOP20	70/Tube
	N32G401F8S7-1		72	64	8	16		8	1	11	10	1x12bit	9	–	–	–	–	1	2	1	–	2/2	–	2	–	–	–	1/8	–	–	–		TSSOP20	70/Tube
	N32G401K6L7		72	32	8	26		8	1	20	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		LQFP32	250/Tray
	N32G401K8L7		72	64	8	26		8	1	20	14	1x12bit	10	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		LQFP32	250/Tray
	N32G401C6L7		72	32	8	40		8	1	24	14	1x12bit	16	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		LQFP48	250/Tray
	N32G401C8L7		72	64	8	40		8	1	24	14	1x12bit	16	–	–	3	–	1	2	2	–	2/2	–	2	–	–	–	1/8	–	–	–		LQFP48	250/Tray

Note:

1. "-" means not support
2. "*" Means that not all functional pins are led out. For details,please see the pin reuse definition in the data sheet.
3.The Pin2/Pin3 of N32G430F6S7 and N32G430F8S7 are OSC_IN/OSC_OUT;The Pin2/Pin3 of N32G430F6S7-1 and N32D430F8S7-1 are OSC32_IN/OSC32_OUT.

General MCU

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	BEEPER	Connectivity									DMA/Channels	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package	SPQ(PCS)
								Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels						USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO							
N32L43x	N32L433K8L7	Arm® Cortex®-M4F	108	64	24	26	1.8V~3.6V/-40~+105°C	10	1	17	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–	DES/3DES、AES、SHA1/SHA224/SHA256、SM1、SM3、SM4、SM7、MD5、CRC16/CRC32、TRNG	LQFP32	250/Tray
	N32L433KBL7		108	128	32	26		10	1	17	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32	250/Tray
	N32L436C8L7		108	64	24	38		10	1	24	6	1x12bit	10	1x12bit	2	2	Y	–	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		LQFP48	250/Tray
	N32L436CBL7		108	128	32	38		10	1	24	6	1x12bit	10	1x12bit	2	2	Y	–	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		LQFP48	250/Tray
	N32L436R8L7		108	64	24	52		10	1	28	12	1x12bit	16	1x12bit	2	2	Y	–	3	2	1	2/2	–	2	1	1	–	1/8	4x34 8x30	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32L436RBL7		108	128	32	52		10	1	28	12	1x12bit	16	1x12bit	2	2	Y	–	3	2	1	2/2	–	2	1	1	–	1/8	4x34 8x30	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32L436MBL7		108	128	32	64		10	1	28	12	1x12bit	16	1x12bit	2	2	Y	–	3	2	1	2/2	–	2	1	1	–	1/8	4x44 8x40	–	–		LQFP80	119/Tray
N32L40x	N32L402C8Q7		64	64	16	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	–	–	1/8	4x20	–	–		QFN48	490/Tray
	N32L402C8L7		64	64	16	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	–	–	1/8	4x20	–	–		LQFP48	490/Tray
	N32L402CBQ7		64	128	16	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	–	–	1/8	4x20	–	–		QFN48	490/Tray
	N32L402CBL7		64	128	16	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	–	–	1/8	4x20	–	–		LQFP48	490/Tray
	N32L402R8L7		64	64	16	52		10	1	28	12	1x12bit	16	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	–	–	1/8	4x34 8x30	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32L402RBL7		64	128	16	52		10	1	28	12	1x12bit	16	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	–	–	1/8	4x34 8x30	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32L403K8Q7		64	64	16	26		10	1	17	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		QFN32	490/Tray
	N32L403KBQ7		64	128	24	26		10	1	17	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		QFN32	490/Tray
	N32L403KBQ7-1		64	128	24	29		10	1	17	6	1x12bit	10	1x12bit	2	2	–	–	2	2	1	1/1	–	2	–	1	–	1/8	–	–	–		QFN32 (5mmx5mm)	490/Tray
	N32L406C8Q7		64	64	16	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		QFN48	490/Tray
	N32L406CBQ7		64	128	24	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		QFN48	490/Tray
	N32L406CBL7		64	128	24	38		10	1	24	6	1x12bit	10	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		LQFP48	250/Tray
	N32L406R8Q7		64	64	16	52		10	1	28	12	1x12bit	16	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	4x34 8x30	–	–		QFN64	260/Tray
	N32L406RBL7		64	128	24	52		10	1	28	12	1x12bit	16	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	4x34 8x30	–	–		LQFP64 (10mmx10mm)	160/Tray
	N32L406MBL7		64	128	24	64		10	1	28	12	1x12bit	16	1x12bit	2	2	–	–	3	2	1	2/2	–	2	1	1	–	1/8	4x44 8x40	–	–		LQFP80	119/Tray

Note："-" means not support

General MCU

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	BEEPER	Connectivity									DMA/Channels	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package	SPQ(PCS)
								Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels						USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO							
N32G032	N32G032F6U7	Arm® Cortex®-M0	48	32	8	16	1.8V~5.5V/-40~+105°C	6	1	11	3	1x12bit	7	-	1	2	-	2	2	1	2	1/1	-	2	-	1	-	1/8	-	-	-	AES, SM4, CRC16/CRC32, TRNG	UFQFPN20	Tray:624/Tray Tray:490/Tray Tape:5000/Reel
	N32G032F6S7		48	32	8	16		6	1	11	3	1x12bit	9	-	1	3	-	1	2	1	2	1/1	-	2	-	1	-	1/8	-	-	-		TSSOP20	70/Tube
	N32G032F8S7		48	64	16	16		6	1	11	3	1x12bit	9	-	1	3	-	1	2	1	2	1/1	-	2	-	1	-	1/8	-	-	-		TSSOP20	70/Tube
	N32G032P6W7		48	32	8	21		6	1	15	3	1x12bit	10	-	1	3	-	2	2	2	2	2/1	-	2	-	1	-	1/8	-	-	-		WLCSP25	3000/Reel
	N32G032P8W7		48	64	16	21		6	1	15	3	1x12bit	10	-	1	3	-	2	2	2	2	2/1	-	2	-	1	-	1/8	-	-	-		WLCSP25	3000/Reel
	N32G032K6Q7		48	32	8	28		6	1	17	6	1x12bit	10	-	1	3	-	2	2	2	2	2/1	-	2	-	1	-	1/8	-	-	-		QFN32	490/Tray
	N32G032K6L7		48	32	8	26		6	1	17	6	1x12bit	10	-	1	3	-	2	2	2	2	3/2	-	2	-	1	-	1/8	-	-	-		LQFP32	250/Tray
	N32G032K8L7		48	64	16	26		6	1	17	6	1x12bit	10	-	1	3	-	2	2	2	2	3/2	-	2	-	1	-	1/8	-	-	-		LQFP32	250/Tray
	N32G032C8L7		48	64	16	40		6	1	17	6	1x12bit	10	-	1	3	-	2	2	2	2	3/1	-	2	-	1	-	1/8	-	-	-		LQFP48	250/Tray
	N32G032R8L7		48	64	16	56		6	1	17	6	1x12bit	16	-	1	3	-	2	2	2	2	3/1	-	2	-	1	-	1/8	-	-	-		LQFP64 (10mmx10mm)	160/Tray
N32G031x8	N32G031F8U7		48	64	8	16		5	1	11	3	1x12bit	7	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-	CRC16/CRC32	UFQFPN20	Tray:624/Tray Tray:490/Tray Tape:5000/Reel
	N32G031F8S7		48	64	8	16		5	1	11	3	1x12bit	9	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		TSSOP20	70/Tube
	N32G031K8Q7		48	64	8	28		5	1	14	6	1x12bit	10	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		QFN32 (5mmx5mm)	490/Tray
	N32G031K8Q7-1		48	64	8	28		5	1	14	6	1x12bit	10	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		QFN32 (4mmx4mm)	490/Tray
	N32G031K8L7		48	64	8	26		5	1	14	6	1x12bit	10	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		LQFP32	250/Tray
	N32G031C8L7		48	64	8	40		5	1	14	6	1x12bit	12	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		LQFP48	250/Tray
N32G031x6	N32G031F6U7		48	32	8	16		5	1	11	3	1x12bit	7	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		UFQFPN20	Tray:624/Tray Tray:490/Tray Tape:5000/Reel
	N32G031F6S7		48	32	8	16		5	1	11	3	1x12bit	9	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		TSSOP20	70/Tube
	N32G031K6Q7		48	32	8	28		5	1	14	6	1x12bit	10	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		QFN32 (5mmx5mm)	490/Tray
	N32G031K6Q7-1		48	32	8	28		5	1	14	6	1x12bit	10	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		QFN32 (4mmx4mm)	490/Tray
	N32G031K6L7		48	32	8	26		5	1	14	6	1x12bit	10	-	1	1	-	2	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		LQFP32	250/Tray
N32G030	N32G030F6U7		48	32	8	16		5	1	11	3	1x12bit	7	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		UFQFPN20	Tray:624/Tray Tray:490/Tray Tape:5000/Reel
	N32G030F6S7		48	32	8	16		5	1	11	3	1x12bit	9	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		TSSOP20	70/Tube
	N32G030F8S7		48	64	8	16		5	1	11	3	1x12bit	9	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		TSSOP20	70/Tube
	N32G030K6Q7		48	32	8	28		5	1	14	6	1x12bit	10	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		QFN32 (5mmx5mm)	490/Tray
	N32G030K6Q7-1		48	32	8	28		5	1	14	6	1x12bit	10	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		QFN32 (4mmx4mm)	490/Tray
	N32G030K6L7		48	32	8	26		5	1	14	6	1x12bit	10	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		LQFP32	250/Tray
	N32G030K8L7		48	64	8	26		5	1	14	6	1x12bit	10	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		LQFP32	250/Tray
	N32G030C8L7		48	64	8	40		5	1	14	6	1x12bit	12	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		LQFP48	250/Tray
	N32G030C8T7		48	64	8	40		5	1	14	6	1x12bit	12	-	1	1	-	1	2	-	1	2/1	-	2	-	-	-	1/5	-	-	-		TQFP48	250/Tray

Note: "-" means not support, (1)Lin mode not supported

General MCU

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	BEEPER	Connectivity									DMA/Channels	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package	SPQ(PCS)
								Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels						USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I^2S	QSPI	I^2C	USB Device	CAN	SDIO							
N32G003	N32G003F4Q7	Arm® Cortex®-M0	48	16	3	18	2V~5.5V/-40~+105°C	3	–	2	6	1x12bit	9	–	–	1	–	1	–	2(1)	–	1/–	–	1	–	–	–	–	–	–	–	CRC16	QFN20 (3mmx3mm)	490/Tray
	N32G003F5Q7		48	29.5	3	18		3	–	2	6	1x12bit	9	–	–	1	–	1	–	2(1)	–	1/–	–	1	–	–	–	–	–	–	–		QFN20 (3mmx3mm)	490/Tray
	N32G003F4S7		48	16	3	18		3	–	2	6	1x12bit	9	–	–	1	–	1	–	2(1)	–	1/–	–	1	–	–	–	–	–	–	–		TSSOP20	70/Tube
	N32G003F5S7		48	29.5	3	18		3	–	2	6	1x12bit	9	–	–	1	–	1	–	2(1)	–	1/–	–	1	–	–	–	–	–	–	–		TSSOP20	70/Tube

Note："-"means not support, (1)Lin mode not supported

Automotive-Grade MCU

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	BEEPER	Connectivity									DMA/Channels	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package	SPQ(PCS)
								Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels						USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO							
N32A455	N32A455REL8	Arm® Cortex®-M4F	72	512	144	51	1.8V~3.6V/ -40~+125°C	8	1	24	12	4x12bit	22	2x12bit	4	7	-	-	3	4	-	3/2	1	4	-	2	1	2/16	-	-	-	DES/3DES、AES、SHA1/SHA224/SHA256、SM1、SM3、SM4、SM7、MD5、CRC16/CRC32、TRNG	LQFP64 10mmx10mm	160/Tray
	N32A455VEL8		72	512	144	80		8	1	24	12	4x12bit	38	2x12bit	4	7	-	-	3	4	-	3/2	1	4	-	2	1	2/16	-	-	-		LQFP100 14mmx14mm	90/Tray
	N32A455CEL7		144	512	144	37	1.8V~3.6V/ -40~+105°C	8	1	23	6	4x12bit	16	2x12bit	4	5	-	-	3	3	-	3/2	1(1)	3	-	2	-	2/16	-	-	-		LQFP48 7mmx7mm	250/Tray
	N32A455REL7		144	512	144	51		8	1	24	12	4x12bit	22	2x12bit	4	7	-	-	3	4	-	3/2	1	4	-	2	1	2/16	-	-	-		LQFP64 10mmx10mm	160/Tray
	N32A455VEL7		144	512	144	80		8	1	24	12	4x12bit	38	2x12bit	4	7	-	-	3	4	-	3/2	1	4	-	2	1	2/16	-	-	-		LQFP100 14mmx14mm	90/Tray

Note："-" means not support； (1) means only single wire

Motor control MCU

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	BEEPER	Connectivity									DMA/Channels	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package	SPQ(PCS)
								Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels						USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I^2S	QSPI	I^2C	USB Device	CAN	SDIO							
N32M417	N32M417C8L7	Arm® Cortex®-M4F	128	64	16	19	MCU:2.4V~3.6V Predrive:5V~20V/ -40~+105°C	8	1	13	12	1x12bit	11	–	4	3	–	–	2	1	–	2/2	–	2	–	1	–	1/8	–	–	–	CRC16/CRC32	LQFP48	250/Tray
N32M418	N32M418K8L7		128	64	16	23	MCU:2.4V~3.6V LDO:3.6V~18V/ -40~+105°C	8	1	7	10	1x12bit	8	–	2	3	–	1	2	2	–	2/2	–	2	–	1	–	1/8	–	–	–		LQFP32	250/Tray

Note: "-" means not support

Bluetooth® LE IC

Series	Commercial Product Code	Core	Frequency(MHz)	Flash(KB)	ROM(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	Connectivity									DMA/Channels	AMIC	IRC	BLE	DVP	Sensitivity	dBm	Power consumption			Cryptographic algorithm	Package	SPQ(PCS)
									Timer	RTC	PWM	complementary PWM	Nb* Resolution	Channels					USART/ISO7816/LIN	UART/LIN	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO								ShuntDown	Sleep	Run(Typ)			
N32WB452	N32WB452CEQ6	Arm® Cortex®-M4F+M0	144	512	144	29	1.8V~3.6V -40~+85℃	8	1	23	6	2x12bit	6	2x12bit	–	–	–	3	2	–	3/2	–	2	1	2	–	2/16	–	–	BLE5.0	–	-94dBm	Up to+3dBm	0.1μA	1.2μA	Rx:3.5mA@3.3V Tx:3.6mA @0dBm/3.3V	AES/DES/3DES/SHA/SM1/SM3/SM4/SM7/MD5、CRC16/CRC32、TRNG	QFN48	490/Tray
	N32WB452REQ6		144	512	144	43		8	1	24	6	2x12bit	11	2x12bit	–	–	–	3	3	–	3/2	–	3	1	2	–	2/16	–	–		–							QFN64	348/Tray
	N32WB452LEQ6		144	512	144	65		8	1	24	6	2x12bit	16	2x12bit	–	–	–	3	4	–	3/2	–	4	1	2	1	2/16	–	–		1							QFN88	168/Tray
N32WB031	N32WB031KCQ6-1	Arm® Cortex®-M0	64	256	48	21	1.8V~3.6V -40~+85℃	4	1	8	6	1x10bit	8	–	–	–	–	2	–	1	2/2	–	1	–	–	–	1/5	1	1	BLE5.1	–	-94dBm @BLE 1Mbps -91dBm @BLE 2Mbps	Up to+6dBm	0.13μA	1.4μA	Rx:3.8mA@3.3V Tx:4.2mA @0dBm/3.3V	CRC16/32	QFN32	490/Tray
	N32WB031KEQ6-2		64	512	48	21	2.32V~3.6V -40~+85℃	4	1	8	6	1x10bit	8	–	–	–	–	2	–	1	2/2	–	1	–	–	–	1/5	1	1		–								

Note："-"means not support

5.8GHz high speed RF IC

Series	Standard	Frequency(MHz)	Operating temperature	Data transfer rate	Wake up sensitivity	RF Receiving sensitivity	Transmit power	Power consumption				SPQ(PCS)
								Standby	Wake up	Receive	Send	
NWF580	GB/T 20851.2-2007	5.73GHz ~ 6.2GHz	-40°C～85°C	256Kbps/ 512Kbps	-83dBm	-80dBm@ MI 85%	-6.1dBm ~ 8.4dBm	0.1μA	2μA	37mA	60mA@0dBm	490/Tray

Note："-"means not support

Battery management ICs

Series	Commercial Product Code	Battery Type	Cells Number	Berttery Capcity (mAh)	Sampling precision (Typ.)	Voltameter precision	LED Segment	Communication	Safety Protection	Feature	Supply voltage(V)	Operating temperature(°C)	Package
NB401	NB401KBQ6C	Li-ion/Li-poly	2-4	100~29000	Voltage: ±1mV Current: ±1mA Temperature: ±2°C	1% (Normal temperature) 3% (Full temperature)	0-6	SMBus	OLD SCC SCD1/2	· High side NMOS*2 · Balancing · Watchdog · SHA/ECC authentication	2.3~26	-40~+85	QFN32 (4mm x 4mm)
NB201	NB201YBF6C	Li-ion/Li-poly	2	100~29000	Voltage: ±1mV Current: ±1mA Temperature: ±2°C	1% (Normal temperature) 3% (Full temperature)	–	SMBus	OLD SCC SCD1/2	· High side NMOS*2 · Balancing · Watchdog · SHA/ECC authentication	2.3~26	-40~+85	DFN12 (2.5mm x 4mm)

Note: "-" means not support

Security IC

Series	Commercial Product Code	CPU Core	Frequency(MHz)	Flash(KB)	SOM(KB)	EEPROM(KB)	SRAM(KB)	I/O	Supply voltage/ Operating temperature	Timer: Timer	Timer: SysTick	Timer: RTC	PWM	ADC: Nb* Resolution	ADC: Channels	DAC	Capture	COMP	LCD	Three track magnetic head	Connectivity: ISO7816	Connectivity: UART	Connectivity: SPI/I²S	Connectivity: I²C	Connectivity: USB Device	Connectivity: ISO14443	DMA/Channels	ESD (HM): Contact(KV)	ESD (HM): Contactless(KV)	Power consumption: PowerDown	Power consumption: Standby	Power consumption: Run(Typ)	Security Management	Cryptographic algorithm	Package	Certification: Cryptography Administr state	Certification: Technology Security Evaluation Center China	Certification: Information Security Certification Center of china	Certification: Bank Card Test Center	Certification: NIST	USB -IF	SPQ(PCS)
Multi-function Security IC	N32S033	Arm® Cortex® -M0	80	512	–	–	33	30	1.8V~5.5V/ -40~+85°C	5	1	1	1	1x10bit	12	–	5	1	–	–	1	2	2/1	2	1	–	1/6	±4	–	0.1uA	80uA	125uA /MHz	•	AES/DES/3DES/ SM1/SM4, RSA/ ECC/SM2/SM9, SHA1/224/256/ 384/512/SM3	QFN48 QFN32 SOP8	Level II	EAL4+	–	–	–	USB IF Certification	490/Tray
	N32S032		80	320	–	–	21	30		5	1	1	8	1x12bit	12	1	5	1	–	–	1	3	2/–	2	1	–	1/8	±4	–	0.1uA	80uA	110uA /MHz	•		QFN48 QFN32 QFN20/SOP8	Level II	EAL5+	–	–	FIPS 140-2 CAVP		
	N32S003		48	64	–	–	6	5 6 4		2	1	–	–	–	–	–	–	–	–	–	1	1	–	1	–	–	–	±6	–	0.5uA	85uA	2.85 mA	•	AES/DES/ 3DES/SM4, RSA/ECC/ SM2, SHA256/ SM3	DFN8-3 DFN8/SOP8 DFN6	Level II	EAL4+	–	–	–	–	Tray: 3000/Reel Tray: 5000/Reel
	Z32HUA	Arm® Cortex® -M0	80	512	–	–	51	33 20	2.4V~5.5V/ -25~+85°C	5	1	1	–	1x12bit –	3 –	1	–	–	–	• –	3 –	1	3/– 1/–	1	1	–	1/8	±4	–	1uA	130uA	20 mA	•	AES/DES/3DES/SM1/SM4, RSA/ ECC/SM2/SM9, SHA1/224/256/ 384/512/SM3	QFN68 QFN32	Level II	EAL4+	–	Terminal IC security assessment, personal payment terminal security assessment	FIPS 140-2 CAVP	USB IF Certification	260/Tray 490/Tray
	Z32HUB	Arm® Cortex® -M0	60	320	–	–	16	22	2.7V~5.5V/ -25~+85°C	2	1	–	1	–	–	–	–	1	–	–	–	1	1/–	–	1	–	2/1	±4	–	1uA	130uA	500uA /MHz	•		QFN32	Level II	EAL4+	–	–	FIPS 140-2 CAVP	USB IF Certification	Tray: 490/Tray Tape: 2500/Reel
	Z8IDA	Zi80 51-SC	32	–	96	32	8	–	2.7V~5.5V/ -25~+85°C	–	–	–	–	–	–	–	–	–	–	–	1	–	–	1	–	–	–	–	–	–	50 uA	4mA	•	DES/3DES/SM4/ SSF33, RSA/SM2/ ECC, SHA1/SHA256/ SM3	DFN8 SOP8	Level II	–	–	–	–	–	5000/Reel
High-capacity security IC	Z32HM	M4K RISC	60	1024	–	–	48	5	2.7V~5.5V/ -25~+85°C	–	–	–	–	–	–	–	–	–	–	–	2	1	1/–	–	–	–	4	–	–	–	<100 uA	7mA @Core 60MHz 3.5mA @Core 30MHz	–	DES/3DES/AES/ SM1/SM4/SM7/ SSF33, RSA/SM2, SHA1/224/256/SM3	WLCSP SOP8 DFN8	Level II	EAL4+	EAL4+	–	FIPS 140-2 CAVP	–	100/Tube
Dual interface smart card security IC	Z32HCD2	Arm® Cortex® -M0	50	–	256	40	11	4	2.4V~5.5V/ -25~+85°C	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	1	–	±4	±6	<200 uA	<200 uA	6mA	–	DES/3DES/SM1/ SM4/SM7/SSF33, RSA/SM2/ECC, SHA1/256/SM3	Strip	Level II	–	EAL4+	PBOC3.0(Debit/Credit, QPBOC/ QPBOC extension), COS detection of the third generation social security and (including physical characteristics)	FIPS 140-2 CAVP	–	Bulk
	Z32HCD2S		50	–	320	80	11	4		–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	1	–	±4	±6	<200 uA	<200 uA	6mA	–									
OTP dynamic command security IC	Z8D16R-2	Zi80 51-SC	2	48	–	–	3.25	16	2.4V~3.6V/ -20~+70°C	–	–	1	–	1x10bit	3	–	–	–	•	–	–	1	–	–	–	–	–	±4	–	< 0.8 uA	< 2uA @32.768 KHz	< 5uA @32.768 KHz; <130uA @2MHz	•	SM3	Die	Level II	–	–	–	–	–	–

Note: "·" means support ; "-" means not support

Package Options

WLCSP

SOP8
4.8mm*3.8mm

DFN8
3mm*3mm/
3mm*2mm

DFN12
2.5mm*4mm

TSSOP20
6.5mm*4.4mm

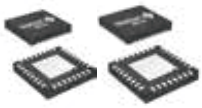
UFQFPN20
3mm*3mm

UQFN20
3mm*3mm

QFN20
3mm*3mm/
4mm*4mm

QFN28
4mm*4mm

QFN32
4mm*4mm/
5mm*5mm



QFN40
5mm*5mm

QFN48
6mm*6mm

QFN64
8mm*8mm

QFN88
10mm*10mm

UFBGA169
7mm*7mm

TFBGA240+25
14mm*14mm

LQFP32
7mm*7mm

LQFP48
7mm*7mm

TQFP48
7mm*7mm

LQFP64
7mm*7mm
10mm*10mm

LQFP80
12mm*12mm

LQFP100
14mm*14mm

LQFP128
14mm*14mm

LQFP144
20mm*20mm

LQFP176
24mm*24mm

LQFP208
28mm*28mm

MCU Ecosystem

Development Ecosystem

Selection

Product Selection Guide

Application Solution

Motor Drive Solution

Security Solution

Storage encryption,
Read/write protection,
partition protection

Technical support and communication

Nation 国民技术 Nations Service Account

21ic 电子技术论坛 bbs.21ic.com

Development&Debug

Manual Application Note Transplant Guide

Software Development Tools Debug Tools

iar KEIL GCC NS-LINK J-Link ULink

Development Evaluation Board

Support RTOS

RTOS 阿里云 腾讯云 RT-Thread µC/OS

Direct, Channel and Online Sample Purchasing

Online & Offline Support from AE+FAE

Mass Production

MP programming tool

创芯工坊

SEGGER

MaxWiz Technology 阿莫智能设备

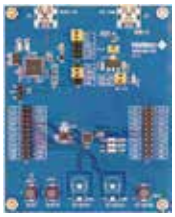
HI-LO SYSTEMS

Security Differential FOTA

国民云

Development Board

· Mininum System Board



· Full Function Development Board

N32G457QE_EVB

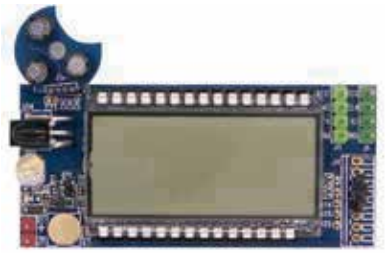
N32L436MBL7_EVB

· Solution Development Board

Motor Drive Development Board
(Single Resistance/Dual Resistance)

· Smart Lock Development Board

· Smart Meter Development Board



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