DRIVEN BY INNOVATION

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Nations MCU BBS

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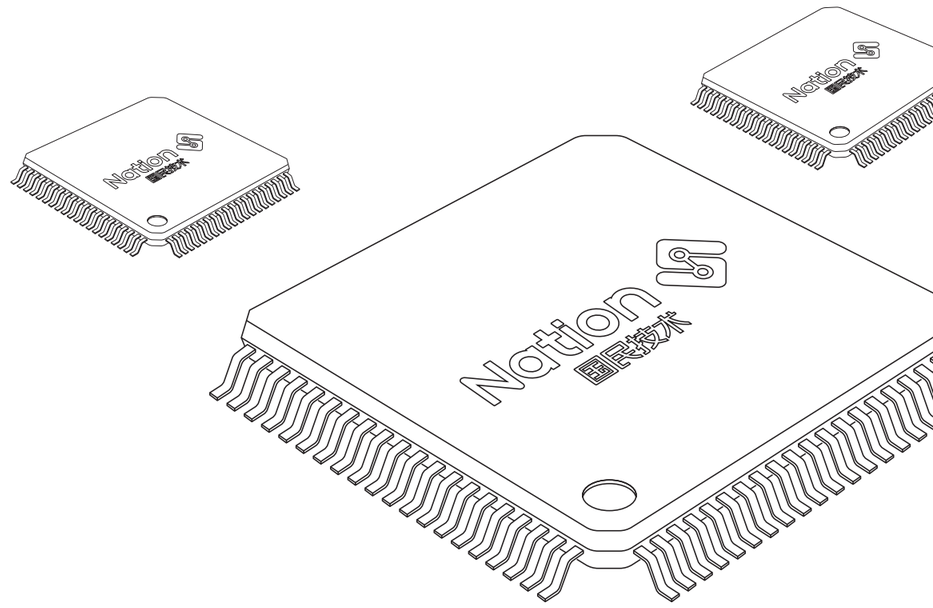
Nation 国民技术

Stock Code:300077

PRODUCT SELECTION GUIDE

Security IC General MCU Wireless RF



February 2022

Nations Technologies 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

Qualifications and Honors

- Deputy Chairman member unit of China Association for Public Companies
- National High-tech Enterprise
- National-level postdoctoral programme
- Leading enterprise in Shenzhen' s independent innovation industries
- Shenzhen R&D Center for Engineering and Technology
- Shenzhen R&D Center for Information Security IC Technology
- Shenzhen Key Laboratory

Technical Competence

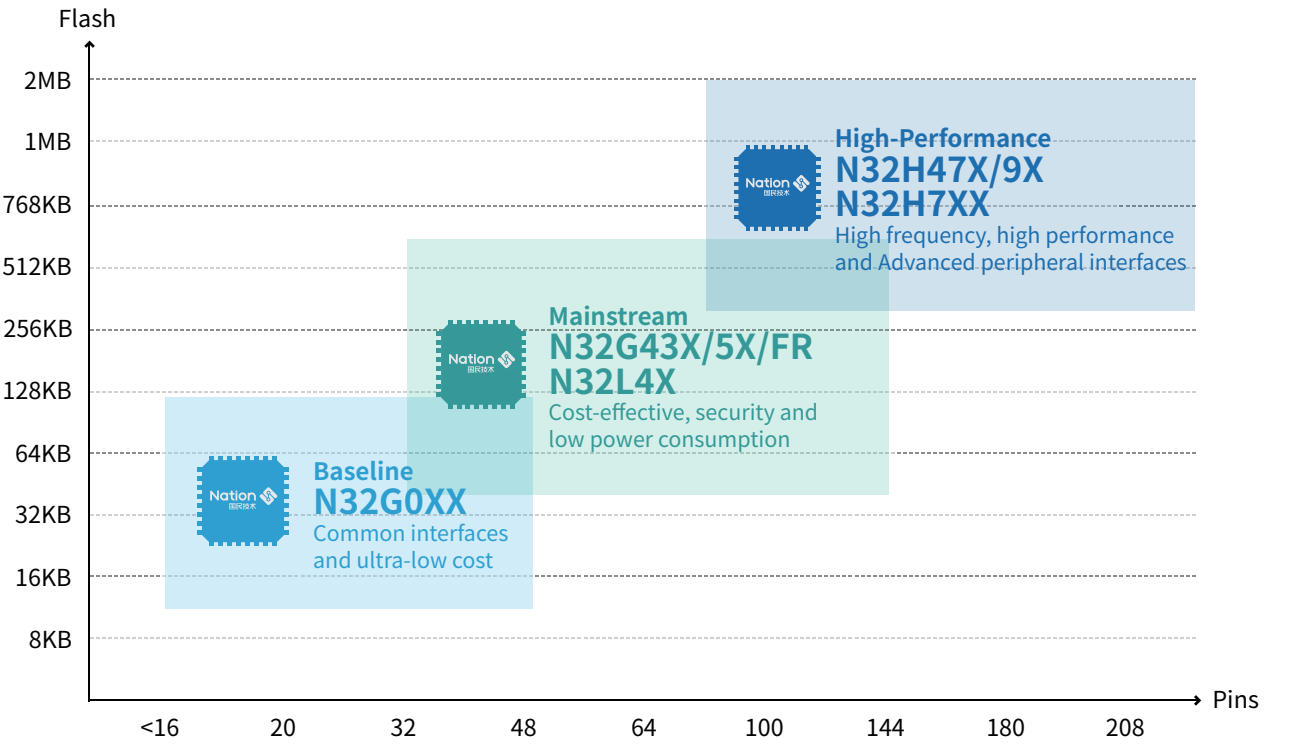
- Own more than 1,400 international and domestic patents, including more than 1,000 invention patents
- Won the "China Patent Gold Award" in 2017. Won 9 of China Patent Excellence Awards for several years
- Own 60 technical standards. RCC technology had become a national standard in May,2017. Own the new generation trusted computing ISO / IEC international standard

Service Capability

- The Globalization of R&D
- Localized technical service team
- Strategic partnerships with world-class wafer vendors

Marketing Strategy Of MCUs

Sustainable Innovation, Providing More than **100** Product Models For Various Industries



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=Value
x2=Mainstream
x3/5=High-performance
x6=LCD series
x7=Interconnect
FR=Fingerprint identification series

Pin Count (pins)
F=20Pin
P=25Pin
K=32Pin
C=48Pin
R=64Pin
M=80Pin
V=100Pin
Q=128Pin

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

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

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

Security IC

Series	Commercial Product Code	CPU Core	Frequency (MHz)	Flash (KB)	ROM (KB)	EEPROM (KB)	SRAM (KB)	I/O	Supply voltage/ Operating temperature	Timer			PWM	ADC		DAC	Capture	COMP	LCD	Three track magnetic head	Connectivity						DMA / PWM	ESD (HM)		Power consumption			Security Management	Cryptographic algorithm	Package	Certification						
										Timer	SysTick	RTC		Nb Resolution	PWM						ISO7816	UART	SPI / I²S	I²C	USB Device	ISO14443		Contact(KV)	Contactless(KV)	PowerDown	Standby	Run(Typ)				State Cryptography Administr	China Information Technology Security Evaluation Center	Information Security Certification Center of China	Bank Card Test Center	NIST	USB-IF
Multi-function Security IC	N32S032	ARM Cortex-M0	80	320	–	–	21	30	1.8V~5.5V/ -40~+85°C	5	1	1	8	1x12bit	12	1	5	1	–	–	1	3	2/–	2	1	–	1/8	±4	–	0.1uA	80uA	110uA /MHz	•	AES/DES/ 3DES/SM1/ SM4、RSA/ ECC/SM2/ SM9、SHA1/ 224/256/384/ 512/SM3	QFN48 QFN32 QFN20/SOP8	Level II	EAL5+	–	–	FIPS 140-2 CAVP	USB IF Certification
	N32S033		80	512	–	–	33	30		5	1	1	1	1x10bit	10	–	5	1	–	–	1	2	2/1	2	1	–	1/6	±4	–	0.1uA	80uA	125uA /MHz	•		QFN48 QFN32 SOP8	Level II	EAL4+	–	–	–	
	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
	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	130 uA	20 mA	•		QFN68 QFN32	Level II	EAL4+	–	Terminal IC security assessment, personal payment terminal security assessment	FIPS 140-2 CAVP	USB IF Certification
	Z8IDA	Zi80 51-SC	32	–	96	32	8	–	2.7V~5.5V/ -25~+85°C	–	–	–	–	1x10bit	3	–	–	–	–	–	1	–	–	1	–	–	–	–	–	–	50 uA	4mA	•	DES/3DES/ SM4/SSF33, RSA/SM2, ECC,SHA1/ SHA256/ SM3	DFN8 SOP8	Level II	–	–	–	–	–
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 @32.768KHz	< 5uA @32.768KHz : <130 uA	•	SM3	Die	Level I	–	–	–	–	–
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 30MH	–	DES/3DES/AES/ SM1/SM4/SM7 /SSF33,RSA/ SM2,SHA 1/ 224/256/SM3	WLCSP SOP8 DFN8	Level II	EAL4+	EAL4+	–	FIPS 140-2 CAVP	–
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),CCS detection of the third generation social security card (including physical characteristics)	FIPS 140-2 CAVP	–
	Z32HCD2S		50	–	320	80	11	4		–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	1	–	±4	±6	<200 uA	<200 uA	6mA	–								

Note: "·" means support "-" 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	TSC	Connectivity									DMA / PWM	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package
								Timer	RTC	PWM	complementary PWM	Nb Resolution	PWM						USART/ISO7816	UART	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO						
N32G452	N32G452CBL7	ARM Cortex-M4F	144	128	80	37	1.8V~3.6V、-40~+105°C	8	1	23	6	2x12bit	10	2x12-bit	–	–	–	–	3	3	–	3/2	1[1]	3	1	2	–	2/16	–	–	–	DES/3DES、AES、SHA1/SHA224/SHA256、SM1、SM3、SM4、SM7、MD5、CRC16/CRC32、TRNG	LQFP48
	N32G452CCL7		144	256	144	37		8	1	23	6	2x12bit	10	2x12-bit	–	–	–	–	3	3	–	3/2	1[1]	3	1	2	–	2/16	–	–	–		LQFP48
	N32G452RBL7		144	128	80	51		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64
	N32G452RCL7		144	256	144	51		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64
	N32G452REL7		144	512	144	51		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64
	N32G452MBL7		144	128	80	67		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80
	N32G452MCL7		144	256	144	67		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80
	N32G452MEL7		144	512	144	67		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80
	N32G452VCL7		144	256	144	80		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100
	N32G452VEL7		144	512	144	80		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100
	N32G452QCL7		144	256	144	97		8	1	24	12	2x12bit	18	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP128
	N32G452QEL7		144	512	144	97		8	1	24	12	2x12bit	18	2x12-bit	–	–	–	–	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP128
N32G455	N32G455CBL7		144	128	80	37		8	1	23	6	4x12bit	16	2x12-bit	4	5	–	8	3	3	–	3/2	1[1]	3	1	2	–	2/16	–	–	–		LQFP48
	N32G455CCL7		144	256	144	37		8	1	23	6	4x12bit	16	2x12-bit	4	5	–	8	3	3	–	3/2	1[1]	3	1	2	–	2/16	–	–	–		LQFP48
	N32G455RBL7		144	128	80	51		8	1	24	12	4x12bit	22	2x12-bit	4	7	–	16	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64
	N32G455RCL7		144	256	144	51		8	1	24	12	4x12bit	22	2x12-bit	4	7	–	16	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64
	N32G455REL7		144	512	144	51		8	1	24	12	4x12bit	22	2x12-bit	4	7	–	16	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP64
	N32G455MBL7		144	128	80	67		8	1	24	12	4x12bit	33	2x12-bit	4	7	–	18	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80
	N32G455MCL7		144	256	144	67		8	1	24	12	4x12bit	33	2x12-bit	4	7	–	18	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80
	N32G455MEL7		144	512	144	67		8	1	24	12	4x12bit	33	2x12-bit	4	7	–	18	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP80
	N32G455VBL7		144	128	80	80		8	1	24	12	4x12bit	38	2x12-bit	4	7	–	24	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100
	N32G455VCL7		144	256	144	80		8	1	24	12	4x12bit	38	2x12-bit	4	7	–	24	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100
	N32G455VEL7		144	512	144	80		8	1	24	12	4x12bit	38	2x12-bit	4	7	–	24	3	4	–	3/2	1	4	1	2	1	2/16	–	–	–		LQFP100
N32G457	N32G457RCL7		144	256	144	51		8	1	24	12	4x12bit	22	2x12-bit	4	7	–	16	3	4	–	3/2	1	4	1	2	1	2/16	–	1	Y		LQFP64
	N32G457REL7		144	512	144	51		8	1	24	12	4x12bit	22	2x12-bit	4	7	–	16	3	4	–	3/2	1	4	1	2	1	2/16	–	1	Y		LQFP64
	N32G457MCL7		144	256	144	67		8	1	24	12	4x12bit	33	2x12-bit	4	7	–	18	3	4	–	3/2	1	4	1	2	1	2/16	–	1	Y		LQFP80
	N32G457MEL7		144	512	144	67		8	1	24	12	4x12bit	33	2x12-bit	4	7	–	18	3	4	–	3/2	1	4	1	2	1	2/16	–	1	Y		LQFP80
	N32G457VCL7		144	256	144	80		8	1	24	12	4x12bit	38	2x12-bit	4	7	–	24	3	4	–	3/2	1	4	1	2	1	2/16	–	1	Y		LQFP100
	N32G457VEL7		144	512	144	80		8	1	24	12	4x12bit	38	2x12-bit	4	7	–	24	3	4	–	3/2	1	4	1	2	1	2/16	–	1	Y		LQFP100
	N32G457QEL7		144	512	144	97		8	1	24	12	4x12bit	40	2x12-bit	4	7	–	24	3	4	–	3/2	1	4	1	2	1	2/16	–	1	Y		LQFP128
N32G4FR	N32G4FRKCQ7		144	256	144	24		6	1	10	6	2x12bit	7	2x12-bit	–	–	–	2	1	3	–	2/1	1	3	1	1	–	2/16	–	–	–		QFN32
	N32G4FRKEQ7		144	512	144	24		6	1	10	6	2x12bit	7	2x12-bit	–	–	–	2	1	3	–	2/1	1	3	1	1	–	2/16	–	–	–		QFN32
	N32G4FRHCQ7		144	256	144	32		7	1	12	6	2x12bit	11	2x12-bit	–	–	–	5	2	4	–	3/2	1	4	1	2	–	2/16	–	–	Y		QFN40
	N32G4FRHEQ7		144	512	144	32		7	1	12	6	2x12bit	11	2x12-bit	–	–	–	5	2	4	–	3/2	1	4	1	2	–	2/16	–	–	Y		QFN40
	N32G4FRREL7		144	512	144	51		8	1	24	12	2x12bit	16	2x12-bit	–	–	–	16	3	4	–	3/2	1	4	1	2	1	2/16	–	–	Y		LQFP64
	N32G4FRMEL7		144	512	144	67		8	1	24	12	2x12bit	18	2x12-bit	–	–	–	18	3	4	–	3/2	1	4	1	2	1	2/16	–	–	Y		LQFP80

注：1[1]:Only Single Wire　Y[2]:Only LCD Mode　"-" 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	TSC	Connectivity									DMA / PWM	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package
								Timer	RTC	PWM	complementary PWM	Nb Resolution	PWM						USART/ISO7816	UART	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO						
N32G432	N32G432K8L7	ARM Cortex-M4F	108	64	24	26	1.8V~3.6V, -40~+105°C	10	1	17	6	1x12bit	10	1x12bit	–	–	–	–	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
	N32G432KBL7		108	128	32	26		10	1	17	6	1x12bit	10	1x12bit	–	–	–	–	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32
	N32G432C8L7		108	64	24	38		10	1	24	6	1x12bit	10	1x12bit	–	–	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP48
	N32G432CBL7		108	128	32	38		10	1	24	6	1x12bit	10	1x12bit	–	–	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP48
	N32G432R8L7		108	64	24	52		10	1	28	12	1x12bit	16	1x12bit	–	–	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64
	N32G432RBL7		108	128	32	52		10	1	28	12	1x12bit	16	1x12bit	–	–	–	–	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64
N32G435	N32G435G8Q7		108	64	16	24		9	1	16	6	1x12bit	10	1x12bit	2	2	–	8	2	2	1	1/1	–	2	–	–	–	1/8	–	–	–		QFN28
	N32G435K8L7		108	64	16	26		9	1	17	6	1x12bit	10	1x12bit	2	2	–	8	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32
	N32G435KBL7		108	128	32	26		9	1	17	6	1x12bit	10	1x12bit	2	2	–	8	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32
	N32G435C8L7		108	64	24	38		9	1	24	6	1x12bit	10	1x12bit	2	2	–	15	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP48
	N32G435CBL7		108	128	32	38		9	1	24	6	1x12bit	10	1x12bit	2	2	–	15	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP48
	N32G435R8L7		108	64	24	52		9	1	28	12	1x12bit	16	1x12bit	2	2	–	20	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64
	N32G435RBL7		108	128	32	52		9	1	28	12	1x12bit	16	1x12bit	2	2	–	20	3	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP64
N32L43x	N32L433K8L7		108	64	24	26		9	1	17	6	1x12bit	10	1x12bit	2	2	–	8	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32
	N32L433KBL7		108	128	32	26		9	1	17	6	1x12bit	10	1x12bit	2	2	–	8	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		LQFP32
	N32L436C8L7		108	64	24	38		9	1	24	6	1x12bit	10	1x12bit	2	2	Y	15	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		LQFP48
	N32L436CBL7		108	128	32	38		9	1	24	6	1x12bit	10	1x12bit	2	2	Y	15	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		LQFP48
	N32L436R8L7		108	64	24	52		9	1	28	12	1x12bit	16	1x12bit	2	2	Y	20	3	2	1	2/2	–	2	1	1	–	1/8	4x34 8x30	–	–		LQFP64
	N32L436RBL7		108	128	32	52		9	1	28	12	1x12bit	16	1x12bit	2	2	Y	20	3	2	1	2/2	–	2	1	1	–	1/8	4x34 8x30	–	–		LQFP64
	N32L436MBL7		108	128	32	64		9	1	28	12	1x12bit	16	1x12bit	2	2	Y	24	3	2	1	2/2	–	2	1	1	–	1/8	4x44 8x40	–	–		LQFP80
N32L40x	N32L401C8L7		64	64	16	38		9	1	24	6	1x12bit	10	1x12bit	2	2	–	15	3	2	1	2/2	–	2	–	–	–	1/8	–	–	–		LQFP48
	N32L401CBQ7		64	128	16	38		9	1	24	6	1x12bit	10	1x12bit	2	2	–	15	3	2	1	2/2	–	2	–	–	–	1/8	–	–	–		QFN48
	N32L403K8Q7		64	64	16	26		9	1	17	6	1x12bit	10	1x12bit	2	2	–	8	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		QFN32
	N32L403KBQ7		64	128	24	26		9	1	17	6	1x12bit	10	1x12bit	2	2	–	8	2	2	1	2/2	–	2	1	1	–	1/8	–	–	–		QFN32
	N32L406C8Q7		64	64	16	38		9	1	24	6	1x12bit	10	1x12bit	2	2	–	15	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		QFN48
	N32L406CBQ7		64	128	24	38		9	1	24	6	1x12bit	10	1x12bit	2	2	–	15	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		QFN48
	N32L406CBL7		64	128	24	38		9	1	24	6	1x12bit	10	1x12bit	2	2	–	15	3	2	1	2/2	–	2	1	1	–	1/8	4x20	–	–		LQFP48
	N32L406R8Q7		64	64	16	52		9	1	28	12	1x12bit	16	1x12bit	2	2	–	20	3	2	1	2/2	–	2	1	1	–	1/8	4x34 8x30	–	–		QFN64
	N32L406RBL7		64	128	24	52		9	1	28	12	1x12bit	16	1x12bit	2	2	–	20	3	2	1	2/2	–	2	1	1	–	1/8	4x34 8x30	–	–		LQFP64
	N32L406MBL7		64	128	24	64		9	1	28	12	1x12bit	16	1x12bit	2	2	–	24	3	2	1	2/2	–	2	1	1	–	1/8	4x44 8x40	–	–		LQFP80

注：1[1]:Only Single Wire　Y[2]:Only LCD Mode　"-"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	TSC	Connectivity									DMA / PWM	SEGMENT LCD	ETH	DVP	Cryptographic algorithm	Package
								Timer	RTC	PWM	complementary PWM	Nb Resolution	PWM						USART/ISO7816	UART	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO						
N32G020	N32G020G7QI	ARM Cortex-M0	80	128	21	25	1.8V~5.5V, -40~+85°C	5	1	8	3	1x12bit	12	1x10bit	–	1	–	–	1	2	–	1/–	1	2	–	–	–	1/8	–	–	–	AES/DES/3DES, RSA/ ECC, SHA1/224/256/ 384/512, TRNG, CRC16	QFN32
	N32G020K8QI		80	256	21	30		5	1	8	3	1x12bit	12	1x10bit	–	1	–	–	1	2	–	2/–	1	2	1	–	–	1/8	–	–	–		QFN48
N32G030	N32G030F6U7		48	32	8	16	1.8V~5.5V/-40~+105°C	5	1	11	3	1x12bit	7	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–	CRC16/CRC32	UFQFPN20
	N32G030F6S7		48	32	8	16		5	1	11	3	1x12bit	9	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		TSSOP20
	N32G030K6Q7		48	32	8	28		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		QFN32 (5mmx5mm)
	N32G030K6Q7-1		48	32	8	28		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		QFN32 (4mmx4mm)
	N32G030K6L7		48	32	8	26		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		LQFP32
	N32G030K8L7		48	64	8	26		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		LQFP32
	N32G030C8L7		48	64	8	40		5	1	14	6	1x12bit	12	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		LQFP48
	N32G030C8T7		48	64	8	40		5	1	14	6	1x12bit	12	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		TQFP48
N32G031x6	N32G031F6U7		48	32	8	16		5	1	11	3	1x12bit	7	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–	CRC16/CRC32	UFQFPN20
	N32G031F6S7		48	32	8	16		5	1	11	3	1x12bit	9	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		TSSOP20
	N32G031K6Q7		48	32	8	28		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		QFN32 (5mmx5mm)
	N32G031K6Q7-1		48	32	8	28		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		QFN32 (4mmx4mm)
	N32G031K6L7		48	32	8	26		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		LQFP32
N32G031x8	N32G031F8U7		48	64	8	16		5	1	11	3	1x12bit	7	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–	CRC16/CRC32	UFQFPN20
	N32G031F8S7		48	64	8	16		5	1	11	3	1x12bit	9	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		TSSOP20
	N32G031K8Q7		48	64	8	28		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		QFN32 (5mmx5mm)
	N32G031K8Q7-1		48	64	8	28		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		QFN32 (4mmx4mm)
	N32G031K8L7		48	64	8	26		5	1	14	6	1x12bit	10	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		LQFP32
	N32G031C8L7		48	64	8	40		5	1	14	6	1x12bit	12	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		LQFP48
	N32G031C8T7		48	64	8	40		5	1	14	6	1x12bit	12	–	1	1	–	–	2	–	1	2/1	–	2	–	–	–	1/5	–	–	–		TQFP48
N32G032	N32G032F6U7		48	32	8	16		6	1	11	3	1x12bit	7	–	1	2	–	8	2	1	2	1/1	–	2	–	1	–	1/8	–	–	–	AES、SM4、 CRC16/CRC32、TRNG	UFQFPN20
	N32G032F6S7		48	32	8	16		6	1	11	3	1x12bit	9	–	1	3	–	9	2	1	2	1/1	–	2	–	1	–	1/8	–	–	–		TSSOP20
	N32G032P6W7		48	32	8	21		6	1	15	3	1x12bit	10	–	1	3	–	11	2	2	2	2/1	–	2	–	1	–	1/8	–	–	–		WLCSP25
	N32G032P8W7		48	64	16	21		6	1	15	3	1x12bit	10	–	1	3	–	11	2	2	2	2/1	–	2	–	1	–	1/8	–	–	–		WLCSP25
	N32G032K6Q7		48	32	8	28		6	1	17	6	1x12bit	10	–	1	3	–	17	2	2	2	2/1	–	2	–	1	–	1/8	–	–	–		QFN32
	N32G032K6L7		48	32	8	26		6	1	17	6	1x12bit	10	–	1	3	–	15	2	2	2	3/2	–	2	–	1	–	1/8	–	–	–		LQFP32
	N32G032C8L7		48	64	16	40		6	1	17	6	1x12bit	10	–	1	3	–	20	2	2	2	3/1	–	2	–	1	–	1/8	–	–	–		LQFP48
	N32G032R8L7		48	64	16	56		6	1	17	6	1x12bit	16	–	1	3	–	24	2	2	2	3/1	–	2	–	1	–	1/8	–	–	–		LQFP64

注：1[1]:Only Single Wire　Y[2]:Only LCD Mode　"-"means "not support"

Bluetooth LE IC

Series	Commercial Product Code	Core	Frequency (MHz)	Flash (KB)	SRAM (KB)	I/O	Supply voltage/ Operating temperature	Timer		PWM		ADC		DAC	OPAMP	COMP	LPRCNT	TSC	Connectivity									DMA / PWM	AMIC	IRC	BLE	DVP	Cryptographic algorithm	Package
								Timer	RTC	PWM	complementary PWM	Nb Resolution	PWM						USART/ISO7816	UART	LPUART	SPI/I²S	QSPI	I²C	USB Device	CAN	SDIO							
N32WB020	N32WB020GEQI	ARM Cortex-M0+M0	80	320	20	17	1.8V~5.5V -40~+85°C	5	1	4	1	1x12bit	6	–	–	–	–	–	–	2	–	1/0	–	2	1	–	–	1/8	–	–	BLE4.2	–	CRC16	QFN32
N32WB031	N32WB031KCQ6-1 (1)	ARM Cortex-M0	64	256	48	21	1.8V~3.6V -40~+85°C	4	1	8	6	1x10bit	8	–	–	–	–	–	–	2		1	2/2	–	1	–	–	–	1/5	1	1	BLE5.1	–	CRC16/32	QFN32
	N32WB031KEQ6-2 (1)		64	512	48	21	2.32V~3.6V -40~+85°C	4	1	8	6	1x10bit	8	–	–	–	–	–	–	2	–	1	2/2	–	1	–	–	–	1/5	1	1		–		
N32WB452	N32WB452CEQ6	ARM Cortex-M4F+M0	144	512	144	30	1.8V~3.6V -40~+85°C	8	1	23	6	2x12-bit	6	2x12-bit	–	–	–	6	3	2	–	3/2	–	2	1	2	2	2/16	–	–	BLE5.0	–	AES/DES/3DES/ SHA/SM1/SM3/ SM4/SM7/MD5	QFN48
	N32WB452REQ6		144	512	144	44		8	1	24	6	2x12-bit	11	2x12-bit	–	–	–	13	3	3	–	3/2	–	3	1	2	2	2/16	–	–		Y		QFN64
	N32WB452LEQ6		144	512	144	68		8	1	24	6	2x12-bit	15	2x12-bit	–	–	–	16	3	4	–	3/2	–	4	1	2	2	2/16	–	–		Y		QFN88

Note: (1) "-2" means the supply voltage 2.32-3.6V "-1" means the supply voltage 1.8-3.6V "·" means support "-" means "not support"

Ultra Low Power Consumption Bluetooth IC

Series	ROM (Kbytes)	RAM (Kbytes)	CPU Core	Frequency (MHz)	Standard	Supply voltage	GPIO	Connectivity			32Bit TIMER	RTC	PWM	10Bit GPADC CH	Sensitivity	Transmit power	Power Consumption			Certification	Package
								UART	I²C	SPI							ShutDown	Sleep	Run (Typ)	Bluetooth SIG	
NZ8801	128	32	32-bit processor	32	BLE 5.0	1.62V~3.6V -40°C~85°C	17	1	1	1	4	1	3	3	-94dBm	Max +3dBm	<0.1μA	<1μA	Rx:3.5mA@3.0V Tx:3.6mA@3.0V	BQB Certification	QFN32 (4mm * 4mm)

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			
								Standby	Wake up	Receive	Send
NWF580	GB/T 208512-2007	5.73GHz ~ 6.2GHz	-40°C~85°C	256Kbps/ 512Kbps	-83dBm	-80dBm@ 调制系数85%	-6.1dBm ~ 8.4dBm	0.1μA	2μA	37mA	60mA@0dBm

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

Contactless read/write IC

Series	Operating Temperature	Connectivity			ISO/IEC 14443-A/B	Type	Read/write range	Receiving current	Transmitting current	Low power consumption card detection function	Receiving voltage	Transmitting voltage	Package
		UART	I²C	SPI									
NZ3801	2.5V~3.6V -25°C~85°C	1.2Mbps	3.4Mbps	10MHz	106kbps/106kbps/ 212kbps/212kbps/ 424kbps/424kbps/ 848kbps	Type A, Type B	100mm	9.5mA	60mA/ 100mA (max)	-	2.2V~3.6V	2.2V~3.6V	QFN32
NZ3802	2.5V~3.6V -25°C~85°C	1.2Mbps	3.4Mbps	20MHz (max)	848kbps	Type A, Type B	100mm	9.5mA	60mA/ 100mA (max)	-	2.2V~3.6V	2.2V~5V	QFN32

Package Options

WLCSP

SOP8
4.8mm*3.8mm

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

TSSOP20
6.5mm*4.4mm

UFQFPN20
3mm*3mm

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

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

QFN40
5mm*5mm

QFN48
6mm*6mm

QFN64
8mm*8mm

QFN88
10mm*10mm

LQFP32
7mm*7mm

LQFP48
7mm*7mm

LQFP64
10mm*10mm

LQFP80
12mm*12mm

LQFP100
14mm*14mm

LQFP128
14mm*14mm

MCU Ecosystem

Development Board

Minimum System Board

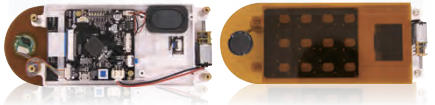
Full Function Development Board

N32G457QE_EVB

N32L436MBL7_EVB

Solution Development Board

Motor Drive Development Board
(Single Resistance/Dual Resistance)



Smart Lock Development Board

Smart Meter Development Board

MP & Debug Tool

Offline Programmer

Online Debug Tool

Third Party Partners

ARM · FreeRTOS · 阿里云 · 腾讯云 · RT-Thread · µC/OS RTOS and Stacks · IAR SYSTEMS · KEIL Tools by ARM · MaxWiz Technology · 阿莫智能设备 · HI-LO SYSTEMS · 创芯工坊

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