

N32H492xE/xG

N32H492	32 bit ARM Cortex-M4F	240MHz	DSP
1MB	Flash 320KB SRAM	80KB CCM SRAM + 4KB Backup SRAM	3 12bit 4.7Msps
ADC 2	12bit DAC	USB FS Device USB HS Host/Device	U(S)ART I2C SPI CAN-FD Ethernet
	SDIO FEMC xSPI SDRAM	I2S	
		AES/TDES	SHA SM3 SM4
MD5	TRNG	CRC16/32	

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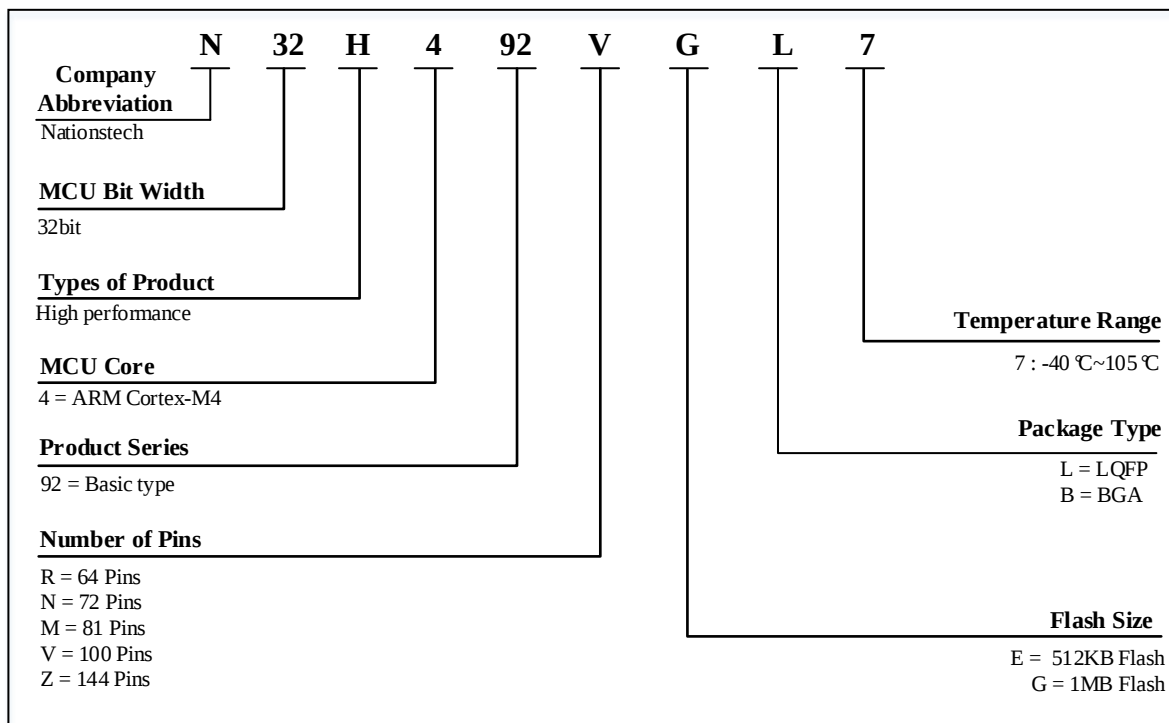
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●	118 GPIOs	PD6~PD7	PG9~PG15	9	IO	VDDIO
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●			Cordic			
●	Delta Sigma	(DSMU)				
●	2	DMA		8		
●	RTC					
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- 3.

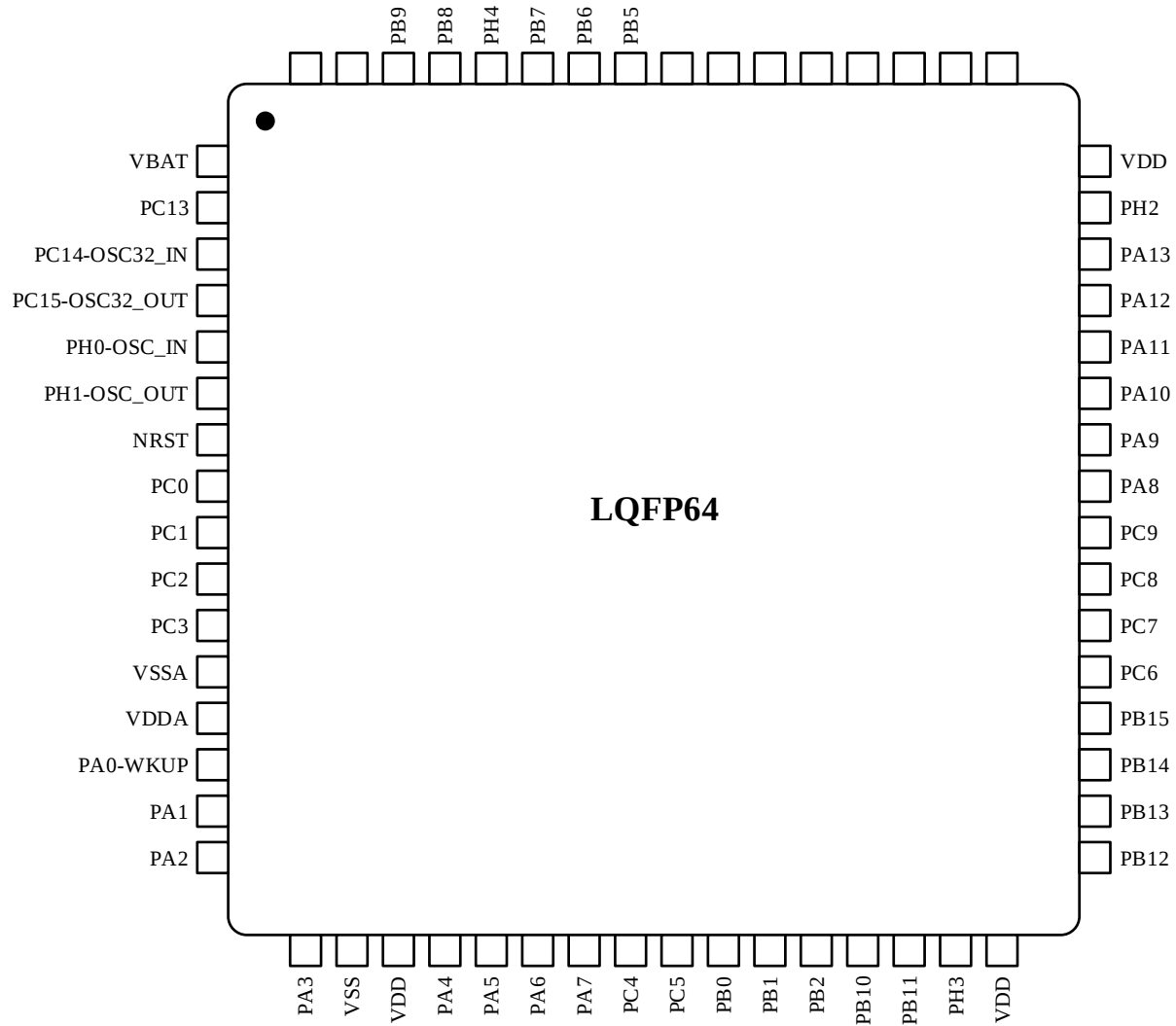
		N32H492RE/RG L7		N32H492RE/RG B7		N32H492NE/NG B7		N32H492ME/M GB7		N32H492VE/VG L7		N32H492ZE/ZG L7	
		1.8~3.6V/-											
CPU		ARM Cortex-M4F @240MHz, 300DMIPS											
Flash	KB	512	1024	512	1024	512	1024	512	1024	512	1024	512	1024
Total SRAM (KB)	General SRAM	240 ⁽¹⁾											
	CCM SRAM ⁽²⁾	80 ⁽³⁾											
	Backup SRAM	4											
	ATIM	3*16bit											
	GTIM	5*16bit											
		2*32bit ⁽⁴⁾											
		3*16bit ⁽⁵⁾											
	BTIM	2*32bit											
	LPTIM	2*16bit											
	SysTick timer	1											
	WWDG	1*14bit											
	IWDG	1*12bit											
	RTC	Yes											
	SPI/I2S	5/2								6/2			
	I²C	4											
	USART	5											
	UART	5											
	USB FS Device	Yes ⁽⁶⁾											
	USB HS DualRole	Yes ⁽⁶⁾											
	FDCAN	3											
	Ethernet	Yes											

12bit ADC Number of channels	3 20	3 23	3 23	3 23	3 20	3 28
12bit DAC Number of channels	2 2					
	DES/3DES AES SHA1/SHA224/SHA256 SM3 SM4 MD5 CRC16/CRC32					
TRNG	Yes					
Cordic	Yes					
DSMU Number of channels	1 8					
	RDP/WRP					
	LQFP64	BGA64	BGA72	BGA81	LQFP100	LQFP144

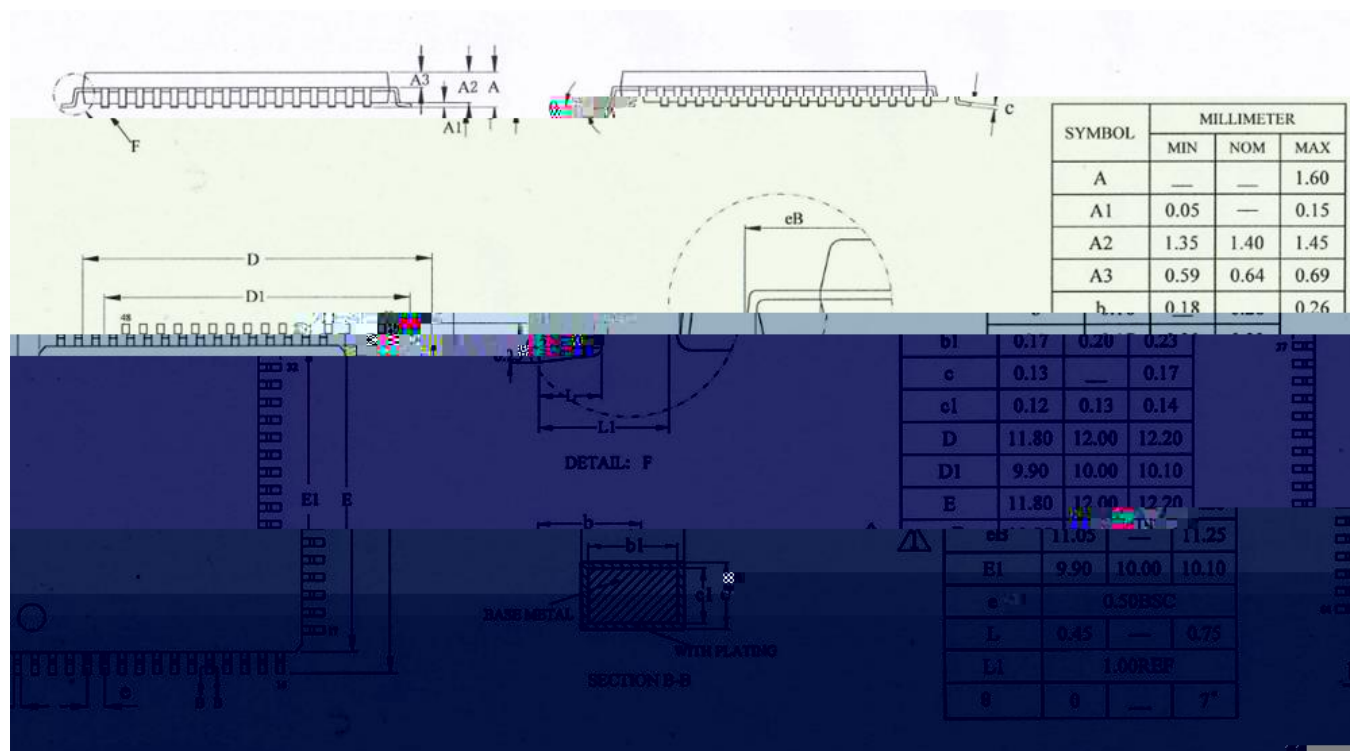
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~ 1 LQFP64

3.1.1 LQFP64



3.1.2 LQFP64





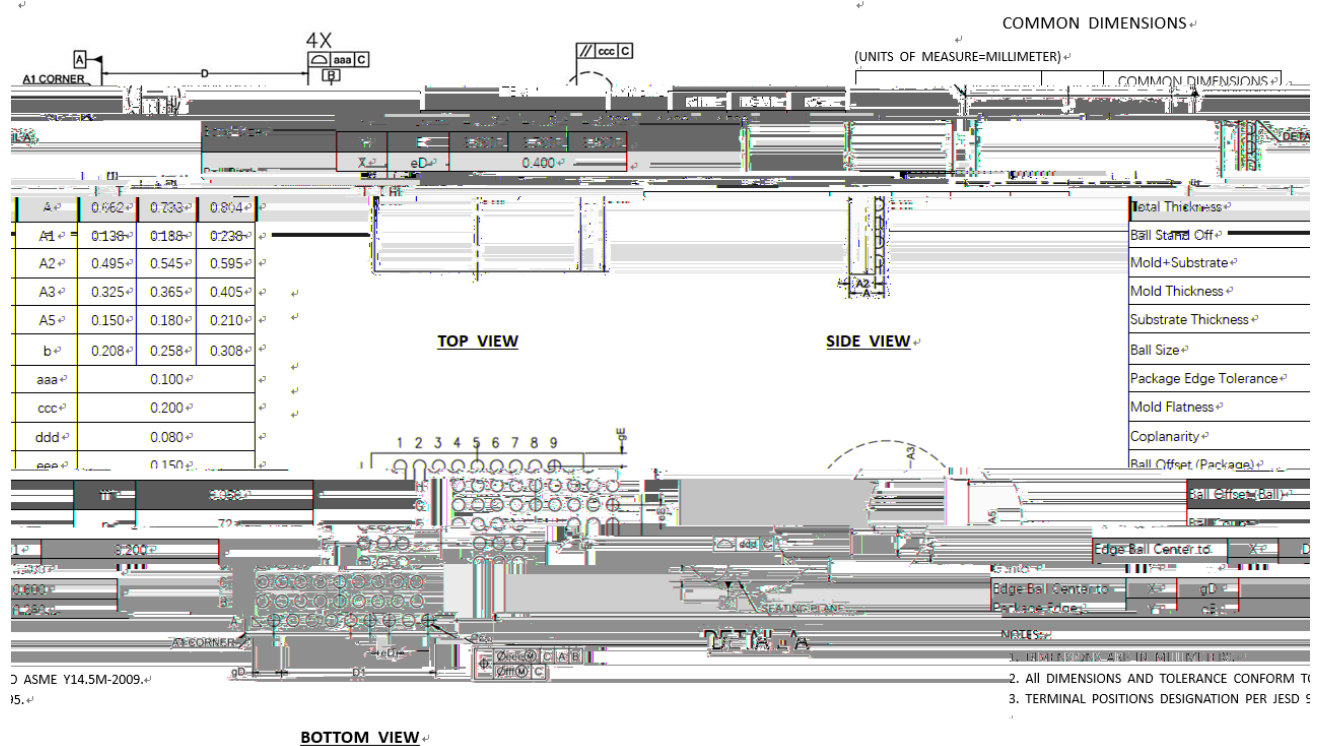
3.2 BGA64

3.2.1 BAG64

3.2.2 BGA64

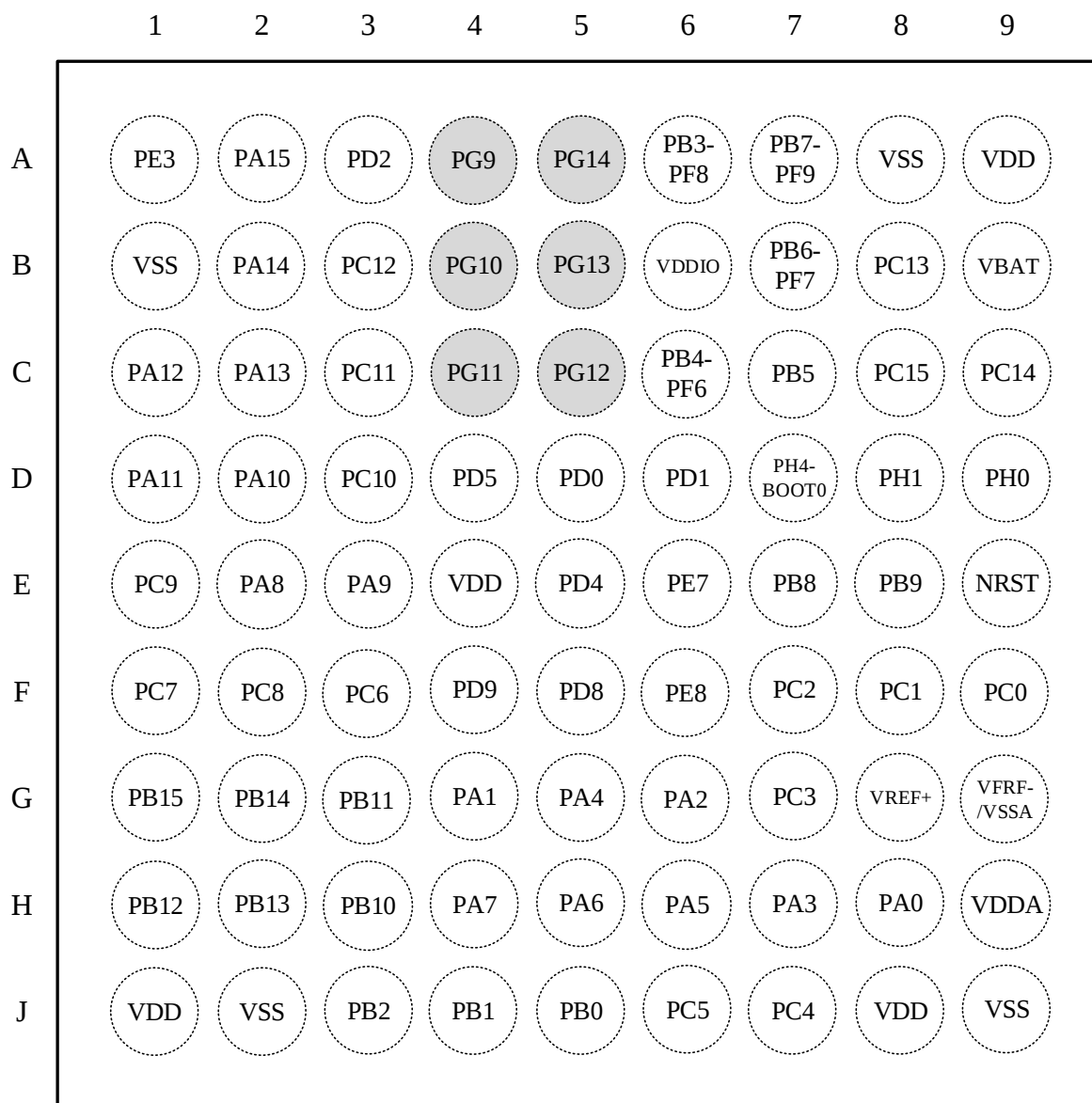
[illegible]

3.3.2 BGA72



3.4 BGA81

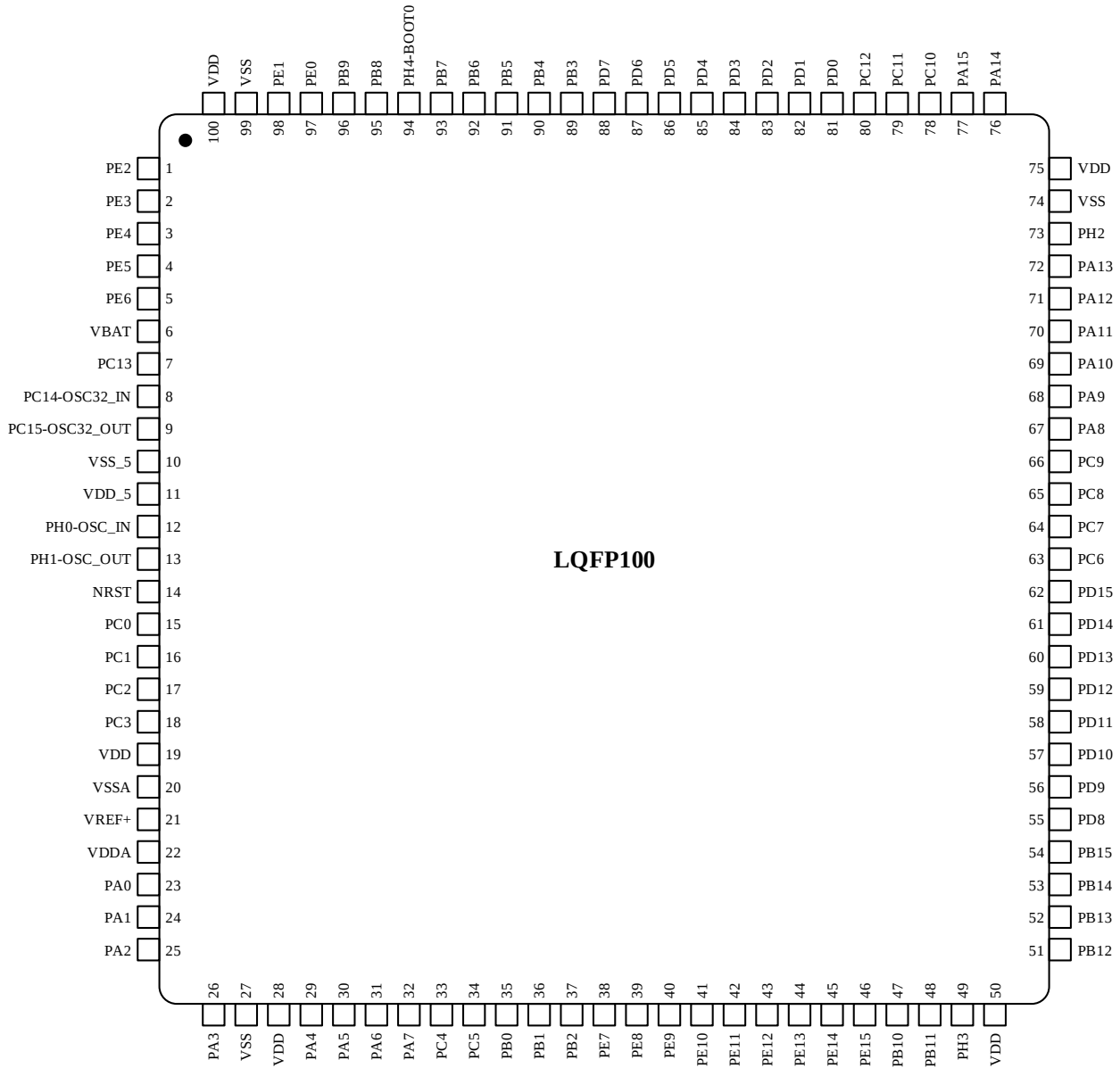
3.4.1 BGA81



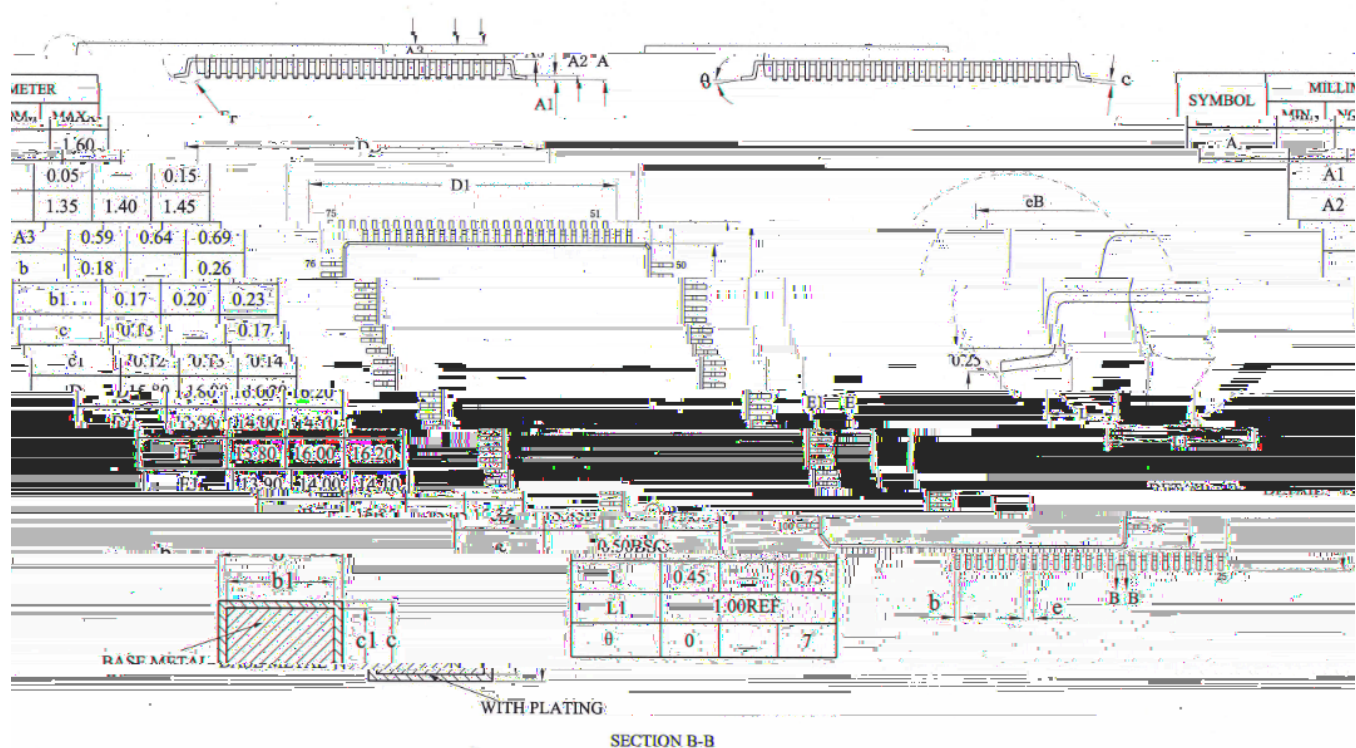
Top view

3.5 LQFP100

3.5.1 LQFP100

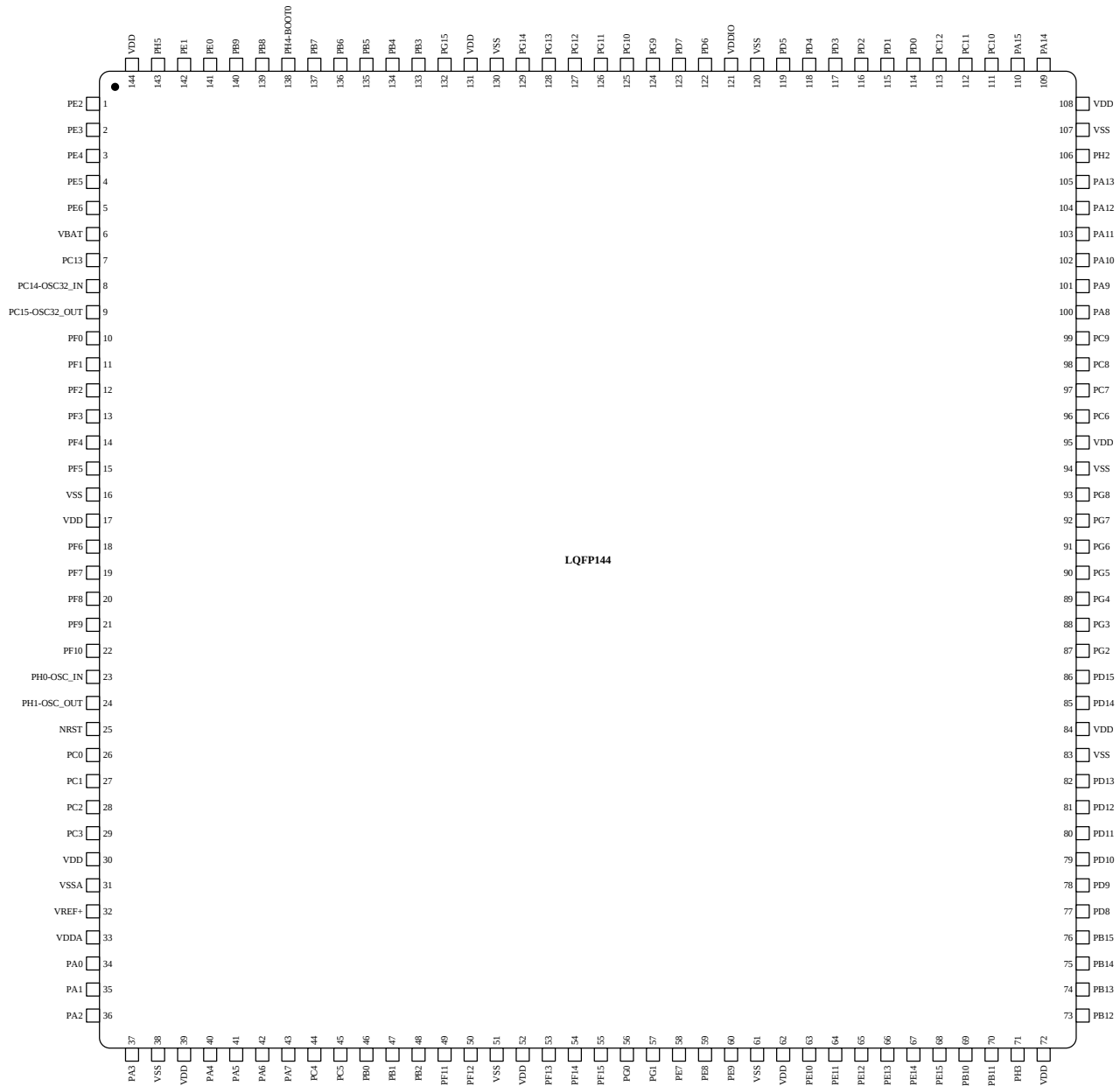


3.5.2 LQFP100

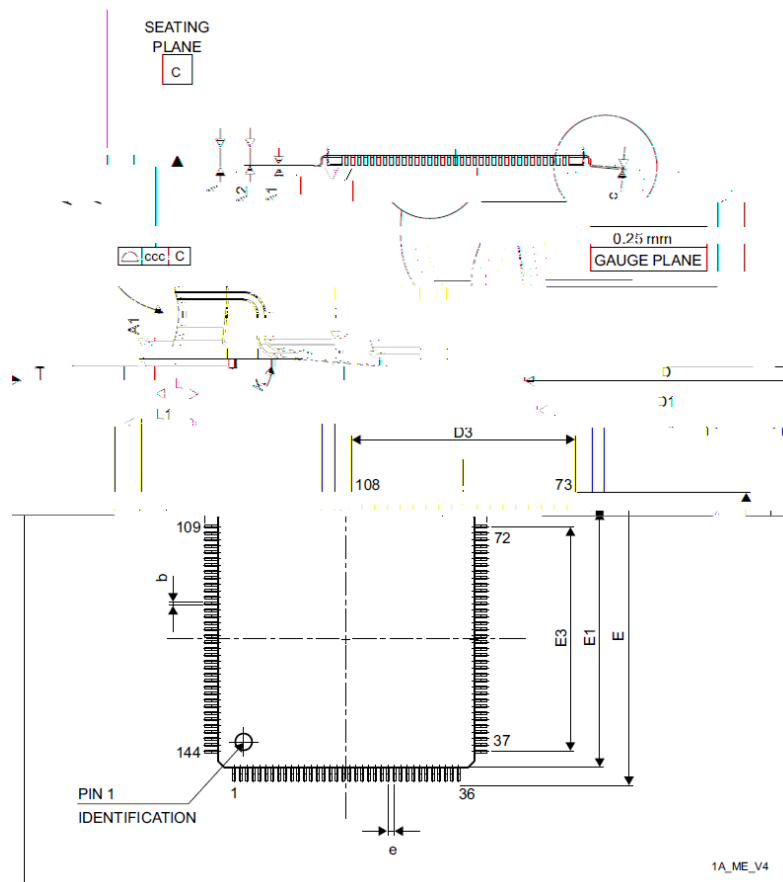


3.6 LQFP144

3.6.1 LQFP144



3.6.2 LQFP144



Symbol	millimeters			inches ⁽¹⁾		
	Min	Typ	Max	Min	Typ	Max
A	-	-	1.600	-	-	0.0630
A1	0.050	-	0.150	0.0020	-	0.0059
A2	1.350	1.400	1.450	0.0531	0.0551	0.0571
0.0106	b	0.170	0.220	0.270	0.0067	0.0087
0.0076	c	0.009	0.010	0.0020	0.0003	0.0004
0.874	D	21.800	22.000	22.200	0.8583	0.8661
0.7953	D1	19.800	20.000	20.200	0.7795	0.7874
0.8740	E	21.800	22.000	22.200	0.8583	0.8661
0.6890	F3	17.500	17.500	0.689	-	-
-	-	0.0197	-	e	-	0.500
0.750	0.0177	0.0236	0.0295	L	0.450	0.600
-	-	0.0394	-	L1	-	1.000
7°	0°	3.5°	7°	k	0°	3.5°
0.080	-	-	0.0031	ccc	-	0

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