

Introduction

The JSC LPDDR2 based MCP product family, provides an integrated solution by stacking in one packages SLC NAND and LPDDR2 Memory components. The JSC memory is designed for applications that need high reliability and performance with lower density.

NAND MCP (SLC + LPDDR2) Product Features

SLC NAND Features

- Error Correction: 4-bit ECC
- Supply Voltage: 1.8V (1.70V to 1.95V)
- Input/Output Bus width: 8-bits / 16-bits
- One Time Programmable (OTP) area
- Serial number (unique ID)
- Non-volatile protection
- Open NAND Flash Interface (ONFI) 1.0 compliant
- Address, Data, and Commands multiplexed

LPDDR2 Features

- Clock rate: up to 533MHz
- VDD1 = 1.70 to 1.95V
- VDD2 / VDDCA / VDDQ = 1.14V to 1.30V
- Data width: x16 / x32
- 4-bit pre-fetch DDR architecture
- 8 internal banks for concurrent operation
- Programmable READ and WRITE latencies (RL/WL)
- Programmable burst lengths: 4, 8, or 16
- Burst Type: Sequential or Interleave
- Auto Precharge option for each burst access
- Partial Array Self-Refresh (PASR)
- Temperature Compensated Self Refresh (TCSR)

MCP Features

- Operating Temperature:
 - Industrial: -40°C to +85 °C
 - Automotive: -40°C to +105 °C
- Packages: 162-ball / 121-ball FBGA

Application

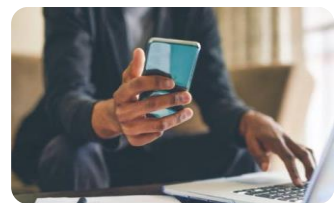
The JSC NAND MCP product family can widely use many kinds of consumer product such as IoT, wearable, mobile, network, consumer and so on. We can also provide high reliability and cost competitiveness and various package & test solution for global customer.



AI-Speaker



Wearable



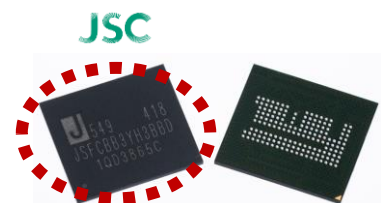
Mobile

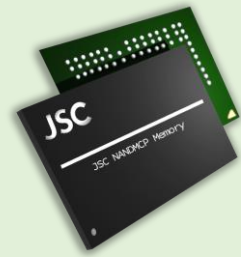


Set-top Box



Digital TV





4Gb + 4Gb LPDDR2 NAND MCP

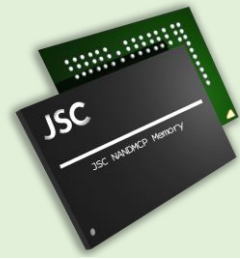
NAND			DRAM			ECC	NAND Page Size	Speed	Package	Part Number	Status
Density	Bus	Type	Density	Bus	Type						
4Gb	x8	SLC	4Gb	x32	LPDDR2	4-bit	2K page	400MHz	162B (8x10.5mm)	JSFCCK3YH3BBL-425	Contact us
4Gb	x8	SLC	4Gb	x32	LPDDR2	4-bit	2K page	533MHz	162B (8x10.5mm)	JSFCCK3YH3BBL-425A	Contact us
4Gb	x8	SLC	4Gb	x32	LPDDR2	4-bit	4K page	400MHz	162B (8x10.5mm)	JSFCCK3YH3FBL-425	M/P
4Gb	x8	SLC	4Gb	x32	LPDDR2	4-bit	4K page	533MHz	162B (8x10.5mm)	JSFCCK3YH3FBL-425A	M/P

4Gb + 2Gb LPDDR2 NAND MCP

NAND			DRAM			ECC	NAND Page Size	Speed	Package	Part Number	Status
Density	Bus	Type	Density	Bus	Type						
4Gb	x8	SLC	2Gb	x32	LPDDR2	4-bit	2K page	533MHz	162B (11.5x13mm)	JSFCBB3YH3BBD-425A	M/P
4Gb	x8	SLC	2Gb	x32	LPDDR2	4-bit	2K page	400MHz	162B (8x10.5mm)	JSFCBB3YH3BBG-425	M/P
4Gb	x8	SLC	2Gb	x32	LPDDR2	4-bit	2K page	533MHz	162B (8x10.5mm)	JSFCBB3YH3BBG-425A	M/P
4Gb	x8	SLC	2Gb	x32	LPDDR2	4-bit	4K page	400MHz	162B (8x10.5mm)	JSFCBB3YH3FBG-425	M/P
4Gb	x8	SLC	2Gb	x32	LPDDR2	4-bit	4K page	533MHz	162B (8x10.5mm)	JSFCBB3YH3FBG-425A	M/P
4Gb	X8	SLC	2Gb	x32	LPDDR2	4-bit	4K page	533MHz	162B (8x10.5mm)	JSFCBB3YH3FBG-425AI	M/P
4Gb	x8	SLC	2Gb	x32	LPDDR2	4-bit	4K page	533MHz	162B (8x10.5mm)	JSFCBB3YH3FBG-425AM	M/P

2Gb + 2Gb LPDDR2 NAND MCP

NAND			DRAM			ECC	NAND Page Size	Speed	Package	Part Number	Status
Density	Bus	Type	Density	Bus	Type						
2Gb	x8	SLC	2Gb	x32	LPDDR2	4-bit	2K page	400MHz	162B (8x10.5mm)	JSFBBB3YH3BBG-425	M/P
2Gb	x8	SLC	2Gb	x32	LPDDR2	4-bit	2K page	533MHz	162B (8x10.5mm)	JSFBBB3YH3BBG-425A	M/P



2Gb + 1Gb LPDDR2 NAND MCP

NAND			DRAM			ECC	NAND Page Size	Speed	Package	Part Number	Status
Density	Bus	Type	Density	Bus	Type						
2Gb	x8	SLC	1Gb	x32	LPDDR2	4-bit	2K page	400MHz	162B (8x10.5mm)	JSFAB3YHABBG-425	M/P
2Gb	x8	SLC	1Gb	x32	LPDDR2	4-bit	2K page	400MHz	162B (8x10.5mm)	JSFAB3YHBBBG-425	M/P
2Gb	x8	SLC	1Gb	x32	LPDDR2	4-bit	2K page	533MHz	162B (8x10.5mm)	JSFAB3YHBBBG-425A	M/P
2Gb	x8	SLC	1Gb	x32	LPDDR2	4-bit	2K page	533MHz	162B (8x10.5mm)	JSFAB3YH3BBG-425A	M/P

1Gb + 1Gb LPDDR2 NAND MCP

NAND			DRAM			ECC	NAND Page Size	Speed	Package	Part Number	Status
Density	Bus	Type	Density	Bus	Type						
1Gb	x8	SLC	1Gb	x32	LPDDR2	4-bit	2K page	400MHz	162B (8x10.5mm)	JSFAAB3YHBBBG-425	M/P
1Gb	x8	SLC	1Gb	x32	LPDDR2	4-bit	2K page	533MHz	162B (8x10.5mm)	JSFAAB3YHBBBG-425A	M/P
1Gb	x8	SLC	1Gb	x32	LPDDR2	4-bit	2K page	533MHz	162B (8x10.5mm)	JSFAAB3YH3BBG-425A	M/P
1Gb	x16	SLC	1Gb	x16	LPDDR2	4-bit	2K page	400MHz	121B (8x8mm)	JSFAAC3YHHBBE-425	EOL (Y21)

1Gb + 512Mb LPDDR2 NAND MCP

NAND			DRAM			ECC	NAND Page Size	Speed	Package	Part Number	Status
Density	Bus	Type	Density	Bus	Type						
1Gb	x8	SLC	512Mb	x32	LPDDR2	4-bit	2K page	400MHz	162B (8x10.5mm)	JSFA9B3YH3BBG-425	Sample Now
1Gb	x8	SLC	512Mb	x32	LPDDR2	4-bit	2K page	533MHz	162B (8x10.5mm)	JSFA9B3YHBBBG-425A	Sample Now