



ChipSiP Q1'11

Logic SiP Lineup

Jan 2011





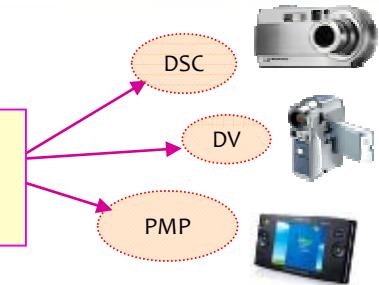
ChipSiP 2011 Niche Memory SiP List

□ DSC/DV Memory SiP Product List

- Core-Chip:

- CT47: ZORAN: Coach 8/9
Novatek: 96433
- CT48: ZORAN: Coach 10/11/12
Novatek: 96433/96450, TI: DM350
Fujitsu: M4B/4ML/M5B/M6A
Ambarella: A2s/A5s

■ CT47: NAND Flash + DDR SDRAM
■ CT48: NAND Flash + DDR2-SDRAM



| Part Number | Description | FLASH | | | DRAM/RAM | | | Package | Outline (mm) | Available |
|---------------|-------------------------------|---------|-------|-------|----------|-------|----------|---------|--------------|-----------|
| | | Voltage | Width | Speed | Voltage | Width | Speed | | | |
| CT47568SR566A | 256Mb NAND+ 256Mb DDR SDRAM | 3.3V | x8 | 50ns | 2.5V | x16 | DDR400 | TFBGA | 10x13x1.4 | Request |
| CT48568SR246C | 256Mb NAND+1Gb DDR II SDRAM | 3.3V | x8 | 50ns | 1.8V | x16 | DDRII800 | TFBGA | 10x13x1.2 | M/P |
| CT48128NS246C | 512Mb NAND+1Gb DDR II SDRAM | 3.3V | x8 | 30ns | 1.8V | x16 | DDRII800 | TFBGA | 10x13x1.2 | M/P |
| CT48248NS246C | 1Gb NAND+1Gb DDR II SDRAM | 3.3V | x8 | 25ns | 1.8V | x16 | DDRII800 | TFBGA | 10x13x1.2 | M/P |
| CT48248NS486C | 1Gb NAND+2Gb DDR II SDRAM | 3.3V | x8 | 25ns | 1.8V | x16 | DDRII800 | TFBGA | 10x13x1.4 | 2011Q1 |
| CT48568SR126A | 256Mb NAND+512Mb DDR II SDRAM | 3.3V | x8 | 50ns | 1.8V | x16 | DDRII667 | TFBGA | 9x9x1.2 | M/P |
| CT48128NS246A | 512Mb NAND+1Gb DDR II SDRAM | 3.3V | x8 | 50ns | 1.8V | x16 | DDRII667 | TFBGA | 9x9x1.2 | M/P |
| CT48568SR248A | 256Mb NAND+1Gb DDR II SDRAM | 3.3V | x8 | 50ns | 1.8V | x16 | DDRII667 | TFBGA | 9x9x1.2 | 2011Q1 |
| CT48248NS126A | 1Gb NAND+512Mb DDR II SDRAM | 3.3V | x8 | 25ns | 1.8V | x16 | DDRII667 | TFBGA | 9x9x1.2 | M/P |
| CT48248NS246A | 1Gb NAND+1Gb DDR II SDRAM | 3.3V | x8 | 25ns | 1.8V | x16 | DDRII800 | TFBGA | 9x9x1.2 | M/P |
| CT48248NS246F | 1Gb NAND+1Gb DDR II SDRAM | 3.3V | x8 | 25ns | 1.8V | x16 | DDRII800 | TFBGA | 15x15x0.9 | M/P |





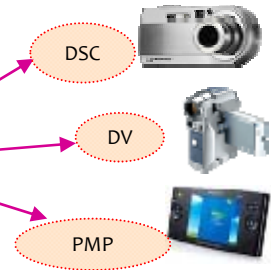
ChipSiP 2011 Niche Memory SiP List

High Speed Moving Shooting DSC/DV Memory SiP Product List

- Core-Chip:

- CT49: ZORAN: Coach
- Fujitsu: M6M
- Ambarella: A5s

■ CT49: NAND Flash + DDR3-SDRAM



| Part Number | Description | FLASH | | | DRAM/RAM | | | Package | Outline (mm) | Available |
|---------------|------------------------------|---------|-------|-------|----------|-------|-------------|---------|--------------|-----------|
| | | Voltage | Width | Speed | Voltage | Width | Speed | | | |
| CT49128NS246D | 512Mb NAND+1Gb DDR III SDRAM | 3.3V | x8 | 25ns | 1.5V | x16 | DDRIII 1066 | TFBGA | 10.5x13.5 | 2011Q1 |
| CT49248NS246D | 1Gb NAND+1Gb DDR III SDRAM | 3.3V | x8 | 25ns | 1.5V | x16 | DDRIII 1066 | TFBGA | 10.5x13.5 | 2011Q1 |
| CT49248NS482 | 1Gb NAND+2Gb DDR III SDRAM | 3.3V | x8 | 25ns | 1.5V | x32 | DDRIII 1066 | TFBGA | 12.5x13.5 | 2011Q2 |
| CT49248NS962 | 1Gb NAND+4Gb DDR III SDRAM | 3.3V | x8 | 25ns | 1.5V | x32 | DDRIII 1066 | TFBGA | 12.5x13.5 | 2011Q2 |

Product Roadmap



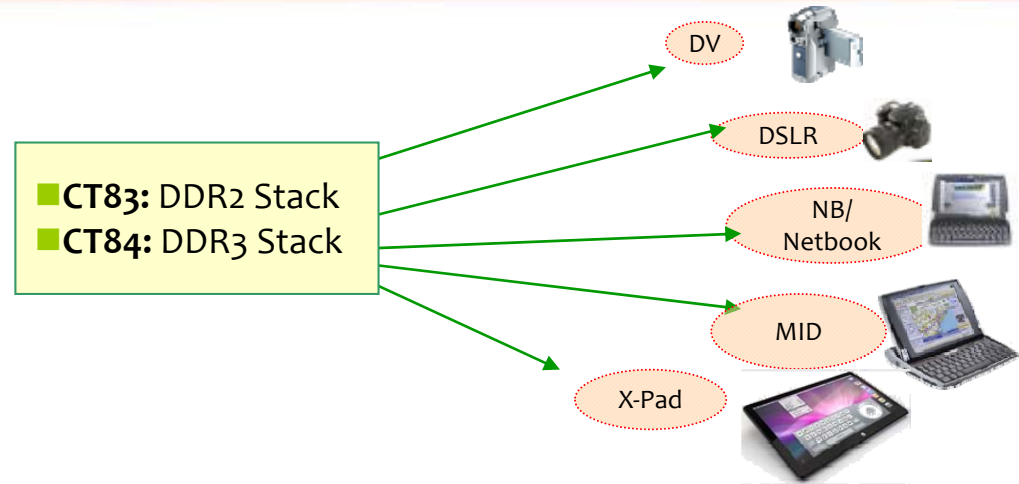
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ChipSiP 2011 Niche Memory SiP List

High speed DSC/DV/DSLR/ Netbook/MID Memory SiP Product List

- CT83: DDR2 stack (1Gb/2Gb follow JEDEC standard)
- CT84: DDR3 stack (2Gb/4Gb/8Gb)



| Part Number | Description | DRAM | | | Package | Outline (mm) | Available |
|-------------|-------------|---------|-------|-------------|---------------|---------------|-----------|
| | | Voltage | Width | Speed | | | |
| CT83962C | 4Gb DDRII | 1.8V | X32 | 667/800Mbps | FBGA,137Balls | 10x13x1.4 | M/P |
| CT83482D | 2Gb DDRII | 1.8V | X32 | 667/800Mbps | FBGA,128Balls | 10.5x13.5x1.1 | M/P |
| CT83242D | 1Gb DDRII | 1.8V | X32 | 667/800Mbps | FBGA,128Balls | 10.5x13.5x1.1 | M/P |
| CT83486C | 2Gb DDRII | 1.8V | X16 | 667/800Mbps | FBGA,128Balls | 10x13 | 2011/Q1 |
| CT83966C | 4Gb DDRII | 1.8V | X16 | 667/800Mbps | FBGA,128Balls | 10x13 | 2011/Q3 |
| CT84482 | 2Gb DDR III | 1.8V | X32 | 1066Mbps | FBGA,128Balls | TBD | 2011/Q2 |
| CT84966 | 4Gb DDR III | 1.8V | X16 | 1066Mbps | FBGA,128Balls | TBD | 2011/Q2 |
| CT84962 | 4Gb DDR III | 1.5V | X32 | 1066Mbps | FBGA,128Balls | TBD | 2011/Q2 |
| CT84922 | 8Gb DDR III | 1.5V | X32 | 1066Mbps | FBGA,128Balls | TBD | 2011/Q3 |

Product Roadmap



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ChipSiP 2011 Niche MCP List

□ e-Reader Memory SiP Product List

■ CT92: Mobile DDR Stack



- CT92: Mobile DDR stack (follow JEDEC standard)

| Part Number | Description | DRAM | | | Package | Outline (mm) | Available |
|-------------|----------------|---------|-------|---------|---------------|--------------|-----------|
| | | Voltage | Width | Speed | | | |
| CT92246B1 | 1Gb Mobile DDR | 1.8V | X16 | 400Mbps | FBGA, 60Balls | 8X10 | 2011Q2 |
| CT92486B1 | 2Gb Mobile DDR | 1.8V | X16 | 400Mbps | FBGA, 60Balls | 8X10 | 2011Q3 |
| CT92482 | 2Gb Mobile DDR | 1.8V | X32 | 400Mbps | TBD | TBD | 2011Q3 |

Product Roadmap



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ChipSiP 2011 Standard MCP List

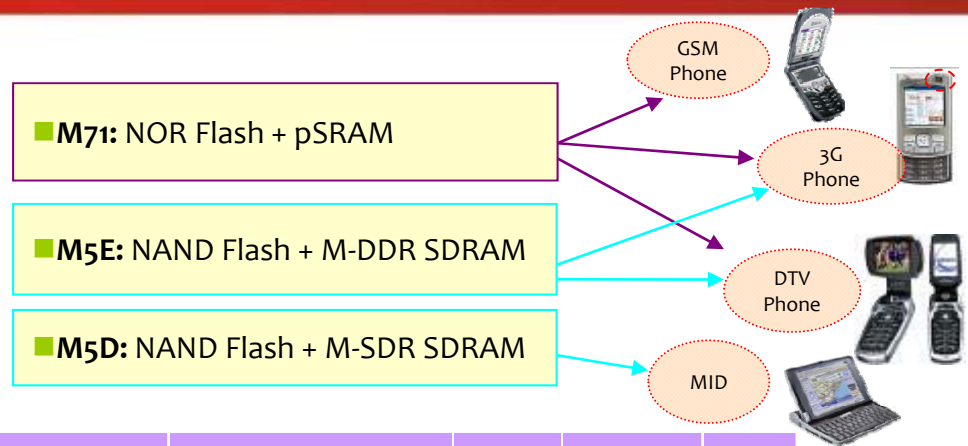


Mobile Phone Memory SiP Product List

(Spansion-Like)

– Core-Chip:

- M71: MTK, Infineon, VIA
- M5E: MTK, Qualcomm



| Part Number | Description | FLASH | | | DRAM/RAM | | | Package | Outline (mm) | Available |
|--------------------|-------------------------------|---------|-------|-------|----------|-------|--------|---------|--------------|-----------|
| | | Voltage | Width | Speed | Voltage | Width | Speed | | | |
| M71NL0328013GW0E0A | 32Mb NOR(TopBoot)+8Mb pSRAM | 3.3V | x16 | 70ns | 3.3V | x16 | 70ns | TFBGA | 7x9x1.2 | 2011/Q1 |
| M71NL032A013GW0E0A | 32Mb NOR(TopBoot)+16Mb pSRAM | 3.3V | x16 | 70ns | 3.3V | x16 | 70ns | TFBGA | 7x9x1.2 | 2011/Q1 |
| M71PL064B0BGW0E0A | 64Mb NOR(Top Boot)+32Mb pSRAM | 3.3V | x16 | 96ns | 3.3V | x16 | 70ns | TFBGA | 7x9x1.2 | 2011/Q1 |
| M5E1G81G2A | 1Gb NAND +1Gb M-DDR SDRAM | 1.8V | x8 | 25ns | 1.8V | x32 | DDR333 | TFBGA | 10.5x13x1.2 | 2011/Q2 |
| M5E1G82G2A | 1Gb NAND +2Gb M-DDR SDRAM | 1.8V | x8 | 25ns | 1.8V | x32 | DDR333 | TFBGA | 10.5x13x1.2 | 2011/Q3 |
| M5E1G81G6A | 1Gb NAND +1Gb M-DDR SDRAM | 1.8V | x8 | 25ns | 1.8V | x16 | DDR333 | TFBGA | 10.5x13x1.2 | 2011/Q2 |
| M5E1G82G6A | 1Gb NAND +2Gb M-DDR SDRAM | 1.8V | x8 | 25ns | 1.8V | x16 | DDR333 | TFBGA | 10.5x13x1.2 | 2011/Q3 |
| M5E568126A | 256Mb NAND +512Mb M-DDR SDRAM | 1.8V | x8 | 25ns | 1.8V | x16 | DDR333 | TFBGA | 10.5x13x1.2 | 2011/Q1 |
| M5E1G8566A | 1Gb NAND + 256Mb M-DDR SDRAM | 1.8V | x8 | 25ns | 1.8V | x16 | DDR333 | TFBGA | 10.5x13x1.2 | Ready |
| M5E1G8126A | 1Gb NAND + 512Mb M-DDR SDRAM | 1.8V | x8 | 25ns | 1.8V | x16 | DDR400 | TFBGA | 10.5x13x1.2 | 2011/Q1 |
| M5D1G6566AA-B006 | 1Gb NAND + 256Mb M-SDR SDRAM | 1.8V | x16 | 35ns | 1.8V | x16 | SDR166 | TFBGA | 10.5x13x1.2 | 2011/Q2 |

Product Roadmap



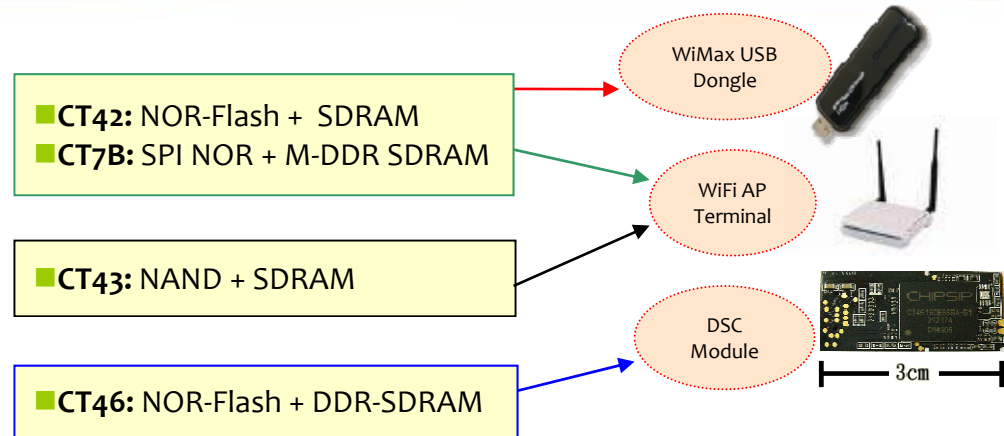
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ChipSiP 2011 Wireless Module Memory SiP List

Modules Memory SiP Product List

- Core-Chip:
 - CT42 / CT43: Ralink RT3050, Ralink RT3052
 - CT46: Fujitsu: MBMO MB91394
 - CT7B: MTK



| Part Number | Description | FLASH | | | DRAM | | | Package | Outline (mm) | Available |
|-----------------|---|---------|--------|-------|---------|-------|--------|---------|--------------|-----------|
| | | Voltage | Width | Speed | Voltage | Width | Speed | | | |
| CT42320TB566C1 | 32Mb NOR Flash (Top Boot)+256Mb SDRAM | 3.3V | x8/x16 | 70ns | 3.3V | x16 | 166MHz | FBGA | 10x13x1.4 | Ready |
| CT42640TB566C1 | 64Mb NOR Flash (Top Boot)+256Mb SDRAM | 3.3V | x8/x16 | 70ns | 3.3V | x16 | 166MHz | FBGA | 10x13x1.4 | 2011/Q1 |
| CT43568SR566C | 256Mb NAND+256Mb SDRAM | 3.3V | x8 | 50ns | 3.3V | x16 | 166MHz | FBGA | 10x13x1.4 | M/P |
| CT46320BB566B | 32Mb NOR(Bottom Boot) + 256Mb DDR SDRAM | 3.3V | x8/x16 | 70ns | 2.5V | x16 | DDR400 | TFBGA | 8x10x1.2 | Request |
| CT7B282UN566H12 | 128Mb SPI NOR+256Mb M-DDR SDRAM | 3.3V | x16 | 70mHZ | 1.8V | x16 | 166MHz | TFBGA | 6x8x1.2 | 2011/Q2 |

Product Roadmap



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