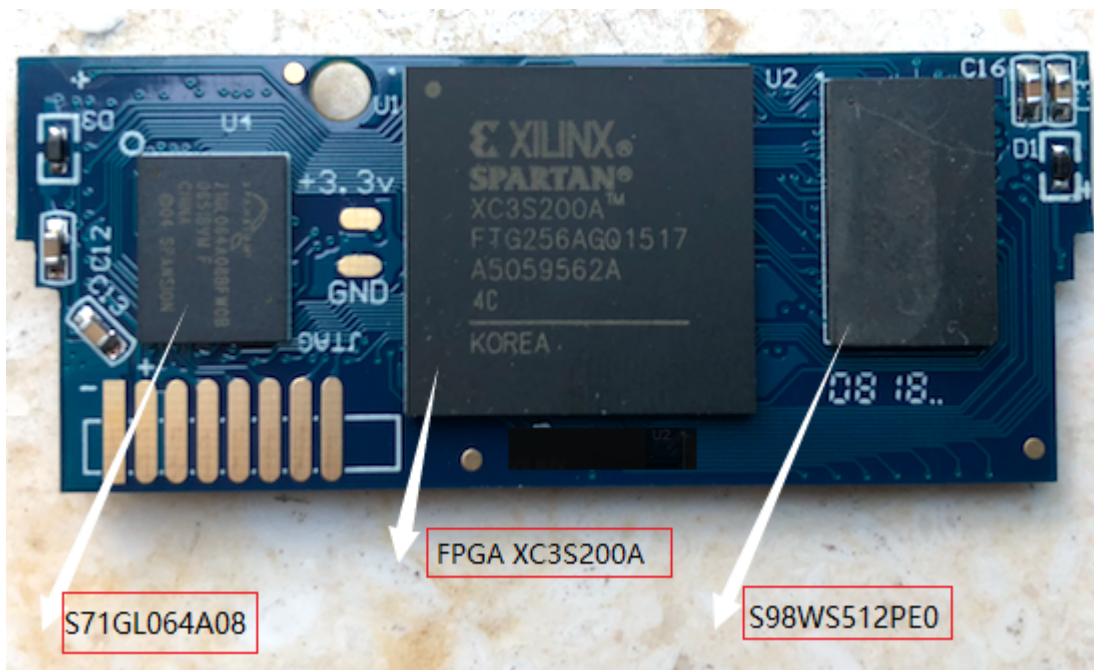
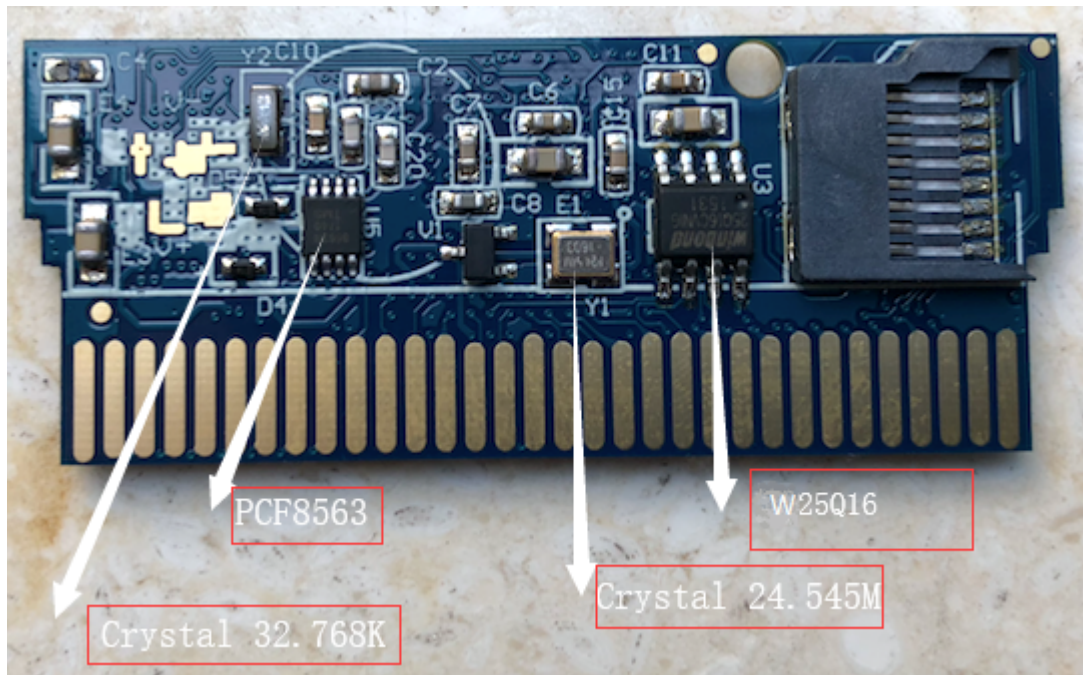


EZ-FLASH OMEGA Document

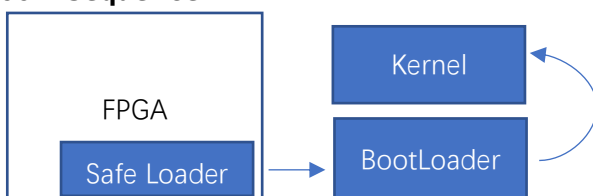
Hardware



S71GL064A08 MCP Chip: 64 Megabit NOR flash 8 Megabit SRAM

S98WS512PE0 MCP Chip: 512 Megabit NOR flash 256Megabit PSRAM

Boot Sequence



S71GL064A08 NOR Allocation

Start Address 16bit	End Address 16bit	Size	Content
0x0	0x8000	0x10000 Byte	BootLoader
NUL			
0x20000	<0x120000	Max 0x200000Byte	Kernel
0x3D0000	0x3D7FFF	0x2000 Byte	NOR INFO
0x3D8000	0x3DFFFF	0x2000 Byte	System Setting

S71GL064A08 SRAM Allocation

SRAM Start Address 16bit	Size	Content	SetRampage	RTS offset
0x0	0x10000 Byte	Save1 64K Byte	0x00	
0x8000	0x10000 Byte	Save2 64K Byte	0x10	
0x10000	0x10000	0x12C00 VRAM buffer	0x20	
0x18000	0x2C00		0x30	
0x20000		02000000-0203FFFF 256K Byte	0x40	0x00000
0x28000			0x50	0x10000
0x30000			0x60	0x20000
0x38000			0x70	0x30000
0x40000	Size 0x8000	03000000-03007FFF 32K Byte	0x80	0x40000
0x44000	0x400	05000000-050003FF 1K Byte	0x80	0x48000
0x44200		NULL		0x48400
0x48000	0x10000 Byte	06000000-06017FFF (96K Byte)	0x90	0x50000
0x50000	0x8000 Byte		0xA0	0x60000
0x54000	0x400	07000000-070003FF 1K Byte	0xA0	0x68000
0x54200		R4-R11	0xA0	0x68400
0x54800	0x400	04000000-040003FE IO	0xA0	0x69000
0x58000				
		FLAG	0xA0	0X6FFF0

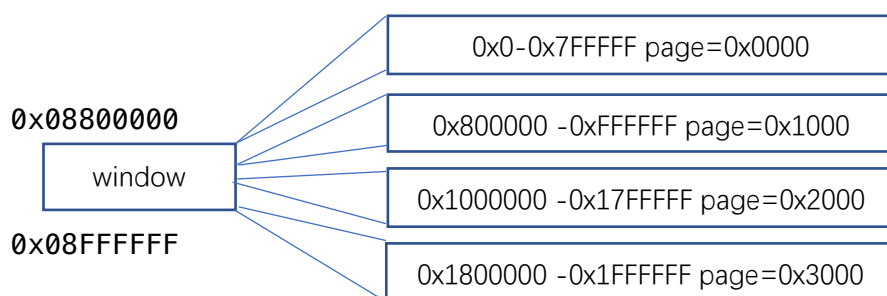
Like EZ3, OMEGA have OS MODE and GAME MODE

OS Mode: The working mode of BootLoader and Kernel

Start Address	End Address	Content	
0x08000000	0x08040000	BootLoader (ROMPGAE 0x8000)	NOR flash(S71GL064A08)
0x08040000	0x087FFFFFFF	Kernel, (ROMPGAE 0x8002)	
0x08800000	0x08FFFFFFF	64Mbit(8MByte>window,1Mbit/page, total 256Mbit(32Mbyte) PSRAM	
0x09000000	0x097FFFFFFF	64Mbit(8Mbyte>window,1Mbit/page, total 512Mbit(64Mbyte) NOR	
0x09E00000		MicroSD read and write buffer address	
0x0E000000	0x0E00FFFF	64 Kbytes SetRampage 0x0	SAVE LOAD
0x0E010000	0x0E01FFFF	64 Kbytes SetRampage 0x10	
0x0E020000		1 page is 32Kbit, (4Kbyte/page), RTS file load	

SetPSRampage: Set the PSRAM window map address.

Available value(0x0000,0x1000,0x2000,0x3000)



SetRampage: Set SRAM Saver offset start address.

Game mode: The working mode for games

PSRAM : SetRompager(0x200)

0x08000000	Total 32Mbyte Space
0x0A000000	

NOR: SetRompager(rompage) 1Mbit/page

GAME 1 offset 0x0, size 4MByte	SetRompager(0)
GAME 2 offset 0x400000, size 8MByte	SetRompager(0x40)
GAME 3 offset 0xC00000	SetRompager(0xC0)
...	

Change Mode

We can toggle between **OS mode** and **Game mode** by set the bit 15 of Rompage to 1 or 0. Set rompage = 0x8000, system goes to **OS mode**. Set rompage(0), system goes to **Game mode**.

PSRAM only have one map address in Game mode, address 0 maps to 0x08000000, Read only.