

MEDIATEK

everyday genius

MT8183 DRAM Bring Up SOP

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Document Revision History

Revision	Date	Description
1.0	2019-03-15	Initial Draft

Table of Contents

Document Revision History	3
Table of Contents	4
1. Introduction	5
1.1 Purpose	5
1.2 Definitions, Acronyms and Abbreviations	5
1.3 References	5
1.4 Overview	5
2. Configuration DRAM	6
2.1 Configure Part Number	6

1. Introduction

1.1 Purpose

This document shows how to configuration the DRAM for the first time bringup.

1.2 Definitions, Acronyms and Abbreviations

1.3 References

1.4 Overview

MT8183 chip can support discrete LPDDR4.

Please choose the DRAM type from **Qualified Pass Memory List**, otherwise some DDR may give us surprise at bringup phase.

The **Qualified Pass Memory List** can be found in MemoryDeviceList_MT6771.xls file which Board ID is MT8183_EVB.

File path:

\\vendor\mediatek\proprietary\bootable\bootloader\preloader\tool\emigen\MT6771\MemoryDeviceList_MT6771.xls

Vendor	Part Number	Type	Mode	Density (Mb)	Board ID
Micron	MT53B512M32D2NP	Discrete LPDR4X	R0_NORMAL+R1_NORMAL	8192+8192	MT8183_EVB
Hynix	H9HCNNBPUMLHR	Discrete LPDR4X	R0_NORMAL+R1_NORMAL	8192+8192	MT8183_EVB
Samsung	K4F6E3S4HM_MGCJ	Discrete LPDR4X	R0_NORMAL+R1_NORMAL	16384	MT8183_EVB

2. Configuration DRAM

2.1 Configure Part Number

Add Part Number at file custom_MemoryDevice.h of project folder of preloader.

File path:

\vendor\mediatek\proprietary\bootable\bootloader\preloader\custom\CUSTOM_PROJECT
\inc\custom_MemoryDevice.h

You can reference for the project aiv8183m1_64_bsp.

File path:

\vendor\mediatek\proprietary\bootable\bootloader\preloader\custom\aiV8183m1_64_bsp
\inc\custom_MemoryDevice.h

```
#define BOARD_ID                MT8183_EVB

#define CS_PART_NUMBER[0]       MT53B512M32D2NP
#define CS_PART_NUMBER[1]       H9HCNNNBPUMLHR
#define CS_PART_NUMBER[2]       K4F6E3S4HM_MGCJ

#endif /* __CUSTOM_MEMORYDEVICE__ */
```