



# **Vendor Specific Component Capabilities (VSCC) Comm.bin Content for 2019 Platforms**

**Application Note**

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***December 2019***

***Revision 5.0.2***

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# Contents

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1	Introduction .....	10
	1.1 Overview .....	10
	1.2 Terminology .....	10
	1.3 Reference Documents.....	10
	1.4 Platform Voltage Requirements.....	11
2	Serial Flash Parts List .....	12

## Tables

Table 2-1. List of Serial Flash Devices Added to the VSCCOMMN.bin File.....	12
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## Revision History

Revision Number	Description	Revision Date
0.7	Initial release	10/16/2009
0.8	Added VSCC value.	10/20/2009
0.9	Added VSCC values of EN25F32 and EN25Q64.	11/20/2009
1.0	Added AMIC A25L016. Replaced with VSCC 200D for SST25VF064C. Changed EN25Q64 device ID to 3017h. Removed W25X128 (product release cancelled). Added alternative VSCC values.	2/25/2010
1.1	Added MX25L6436E, MX25L12836E, MX25L3206E, and EN25Q128. Added alternative VSCC values.	4/29/2010
1.2	Added EN25Q32A. Added alternative VSCC values.	5/5/2010
1.3	Added MX25L8006E, MX25L8036E, MX25L1606E, MX25L1636E, and MX25L6406E Added GD25Q80, GD25Q16, GD25Q32, GD25Q32A, and GD25Q64 Added N25Q032 and N25Q064	6/17/2010
1.4	Added EN25Q16	6/28/2010
1.5	Added AMIC A25L032	9/20/2010
1.6	Added EN25Q80A, EN25Q40, and AMIC A25LQ032 Added S25FL016K, S25FL032K, and S25FL064K	11/9/2010
1.7	Added N25Q16, AT25DQ641	12/16/2010
1.8	Added MX25L4006E, FM25Q16, FM25Q32, and FM25Q64 Added overview and note	1/24/2011
1.9	Added PM25LQ080C, W25Q16CV, W25Q64CV, MX25L3236D, MX25L12835E, MX25L25635E, MX25L25735E, PM25LQ016C, and PM25L032C. Added note #3.	4/12/2011
2.0	Added AT25DQ161, EN25QH16 Changed from EN25Q32A(B) to EN25Q32B Removed GD25Q32A (product plan cancelled) Changed from PM25LQ018C to PM25LQ016C	6/14/2011
2.1	EN25QH80, EN25F64, A25LQ16, and FM25Q128 Changed from A25LQ032 to A25LQ32A Changed from SST to SST/Microchip Removed W25X40V (EOL) Added Intel 7 Series/C216 Chipset Family SPI Programming Guide	8/22/2011



Revision Number	Description	Revision Date
2.2	Added F25L32PA(2S), F25L64PA, F25L16PA, F25L04PA F25L08PA, A25L040, and A25L080. Changed from MX25L3205D to MX25L3205A(D)	10/07/2011
2.3	Updated Chingis devices IDs, Added F25L16PA(2S) and F25L32PA	10/25/2011
2.4	Added W25Q64FV and GD25Q128	12/2/2011
2.5	Added alternative device ID for W25Q64FV Added W25Q128FV Added note #4 and #5	2/14/2012
2.6	Updated vscc value with 0x2009 and 0x2005 in vsccommn.bin for SST25VF016B, SST25VF032B, SST25VF040B, SST25F080B.	4/30/2012
2.7	Updated Chingis device ID with 7F44h, 7F45h, 7F46h in vsccommn.bin for PM25LQ080C, PM25LQ016C, and PM25LQ032C	6/7/2012
2.8	Added quad I/O devices of W25Q256FVFIQ, W25Q128FVFIQ, W25Q128FVSIQ, W25Q64FVSSIQ, W25Q32FVSSIQ, W25Q16CVSSIQ Added quad I/O devices of MX25L6475EM2I-10G and MX25L3275EM2I-10G Updated vscc values per the new definition of bits 7:5 for Lynx Point PCH	6/11/2012
2.9	Updated vscc values in vsccommn.bin per the new definition of bits 7:5 for Lynx Point PCH Added PM25LD512C2	8/7/2012
3.0	Added 25LQ32B Added quad I/O devices of MX25L1675EM2I-10G and W25Q16DVSSIQ	9/19/2012
3.1	Added A25QE16, A25QE32, GD25B16B, GD25B32B, GD25B64B, and MX25L12875F Changed Device ID of W25Q16CVSSIQ and W25Q16DVSSIQ Added note #7	10/31/2012
3.2	Added MX25L12835F and A25LQ64	11/30/2012
3.2.1	Added MX25L6473E, MX25L3273E, MX25L1673E Added MX25L8075E	12/17/2012
3.3	Added MX25L12873F	1/3/2013
3.4	Added S25FL128K Added MX25L8073E	2/6/2013
3.5	Updated VSCC values of EN25QH series	3/11/2013
3.6	Added GD25B128C Updated VSCC values of EN25QH series	3/27/2013
3.7	Added GD25LQ64C Changed VSCC value of A25LQ64 Added MX25L12865E	5/31/2013
3.8	Added N25Q064A13ESE4MF, W25R64FVSSIQ, W25R128FVSIQ, MX25L6450F Added note 8	6/14/2013
3.9	Added S25FL164K0XMFIQ10 and S25FL132K0XMFIQ10	11/27/2013



Revision Number	Description	Revision Date
4.0	Updated device ids for S25FL164K, S25FL132K; Added GD25R64B and MX25L25635F Deleted EOLed spansion parts-S25FL016K, S25FL032K, S25FL064K, S25FL128K (not a real part as per vendor) Added Micron parts: MT25QL128ABA1ESEMS	04/07/2014
4.1	Added Spansion Part: S25FL116K	07/15/2014
4.2	Added Gigadevice parts: GD25B64C, GD25R64C, GD25R128C	08/18/2014
4.3	Added Macronix part: MX25L12850F	08/20/2014
4.4	Added Micron devices N25Q032A13ESEC0F,N25Q128A13ESEC0F,N25Q256A81ESF40F,N25Q512A81GSF40F,N25Q064A13ESE4MF,N25Q064A13ESED0F,N25Q032A11ESE40F,N25Q064A11ESE40F,N25Q128A11ESE40F,N25Q256A83ESF40F,N25Q512A83GSF40F,MT25QL256ABA8ESF-0SIT,MT25QL256ABA8ESF-MSIT,MT25QL512ABA8ESF-0SIT,MT25QU512ABA8ESF-0SIT Added Macronix device MX25L6495FM2I-08G Added EON devices EN25QH64A, EN25QH128A Added Gigadevice devices GD25LB64CSIG, GD25LB128CSIG Added ISSI devices IS25LP128,IC25LP128,IS25LP064,IC25LP064,IS25WP128,IC25WP128,IS25WP064,IC25WP064	1/8/2015
4.5	Added EON devices EN25Q40A, EN25Q80B, EN25QH16A, EN25QH32A	1/21/2015
4.6	Added Macronix parts MX25L3273F, MX25L6473F, MX25L25735F Added Winbond parts W25X05CL, W25X10CL, W25Q10EW, W25X20CL, W25Q20CL, W25Q20EW, W25X40CL, W25Q40CL, W25Q40EW, W25Q80DV, W25Q80EW, W25Q16DV, W25Q16CL, W25Q16FW	6/29/2015
4.7	Removed all the parts that do not support 2016 platforms: W25X80V, W25X16BV, W25X32BV, W25X64BV, W25Q40BV, W25Q80BV, W25Q16BV, W25Q32BV, W25Q64BV, W25Q128BV, W25Q16CV, W25Q64CV, W25Q256FVFIQ, W25Q128FVFIQ, W25Q128FVFIQ, W25Q128FVSIQ, W25Q128FVSIQ, W25Q64FVSSIQ, W25Q64FVSSIQ, W25Q32FVSSIQ, W25Q32FVSSIQ, W25Q16CVSSIQ, W25Q16DVSSIQ, W25R64FVSSIQ, W25R128FVSIQ, MX25L8005, MX25L1605A, MX25L1605D, MX25L1635D, MX25L3205A(D), MX25L3225D, MX25L3235D, MX25L6405D, MX25L12805D, MX25L12845E, MX25L12855E, MX25L3206E, MX25L6436E, MX25L8006E, MX25L8036E, MX25L1606E, MX25L6406E, MX25L4006E, MX25L3236D, MX25L12835E, MX25L25735E, MX25L6450F, MX25L25635F, M25PE80, M25PE16, M25PX32, M25PX64, M25PE10, M25PE20, M25PE40, M25PX80, M25PX16, N25Q064A13ESE4MF, MT25QL128ABA1ESEMS, N25Q512, N25Q512, MT25QL256, MT25QL512, MT25QU512, AT26DF081, AT26DF081A, AT25DF081, AT26DF161, AT26DF161A, AT25DF161, AT26DF321, AT25DF321, AT25DF321A, AT25DF641, AT25DF641A, AT25DQ641, AT25DQ161, SST 25VF016B, SST 25VF032B, SST 25VF040B, SST 25VF080B, SST 25VF064C, PM25LV080B, PM25LV016B, PM25LQ080C, PM25LQ016C, PM25LQ032C, PM25LD512C2, EN25F80, EN25F16, EN25F32, EN25Q32B, EN25Q64, EN25Q128, EN25Q16(A), EN25Q80A, EN25F64, A25L016, A25L032, A25LQ32A, A25LQ16, A25L040, A25L080, A25LQ32B, A25QE16, A25QE32, A25LQ64, GD25Q80B, GD25Q16B, GD25Q32C, GD25Q64C, GD25Q128C, S25FL132K, S25FL164K, S25FL116K, FM25Q16, FM25Q32, FM25Q64, FM25Q128, F25L32PA(2S), F25L64PA, F25L16PA, F25L04PA, F25L08PA, F25L16PA(2S), F25L32PA	3/28/2017
4.7.1	Added Macronix parts MX25U1635F, MX25U3235F, MX25U6473F, MX25U6435F, MX25U12835F, MX25U25635F, MX25L25673G, MX66L51235F, MX25L51245G Added Gigadevice parts GD25Q256C, GD25LQ256C	1/20/2016
4.7.2	Added Micron device N25Q128A, Gigadevice GD25B127C	3/5/2016
4.7.3	Added Micron device N25Q256A	4/5/2016
4.7.4	Added Macronix device MX25U12873F	7/18/2016
4.7.5	Added Macronix device W25Q16JV, W25Q32JV, W25Q64JV, W25Q128JV and W25Q256JV	7/19/2016



Revision Number	Description	Revision Date
4.7.6	added IS25LP256A, IC25LP256A, IS25LP128, IC25LP128, IS25LP064A, IC25LP064A, IS25WP256A, IC25WP256A, IS25WP128, IC25WP128, IS25WP064, IC25WP064, IS25WP064A, IC25WP064A, AT25SF641, AT25SL128A, AT25SL641, AT25SL32, GD25B256C, GD25B127D and W25M512JV	8/18/2016
4.7.7	Changed the Device ID 0 and Device ID 1 on GD25B256C and GD25B127D	9/16/2016
4.7.8	Vendor name changed from EON to EON / ESMT, added new parts of EN25QH16A, EN25QH32A, EN25QH256, EN25QH128A, EN25QH64A, EN25QH40A, EN25Q80B, EN25S64, EN25S64A, EN25S10A, EN25S20A, EN25S40A, EN25S80A, EN25S32 and N25Q064A11EF640E.	10/19/2016
4.7.9	Added W25Q256JW, W25X05CL, W25X10CL, W25X20CL, W25Q20CL, W25X40CL, W25Q40CL, W25Q80DV, W25Q80JV, W25Q80BL, W25Q16CL and W25Q16DW	15-Nov-2016
4.8.0	W25M512JV part changed the Device ID to 0x7119h, Note updated for MX25L25673G, added MX25L12873G. added MX25L12873G, MT25QL256ABA1EW9-0SIT, AT25SF128, AT25QF128, AT25QF641, AT25QL128A, AT25QL641 and AT25QL321	9-Dec-2016
4.8.1	Changed the Title for 2017 and rights reserved year changed.	17-Jan-2017
4.8.2	Added MT25QL512ABA, GD25LB128D, GD25LB256D, MX25U8033E, MX25U1635F, MX25U3273F, MX25U25635F, MX25L8073E, MX25L1673E, MX25L3273F, MX25L6473F, MX25L6450F, MX25L12850F, MX25L12873F, MX25L25673G, MX25L51245G, N25Q064A11ESEA0F	8-Mar-2017
4.8.3	Added W25Q128JVSQ, W25Q80DL, W25Q16JL, W25Q257FV, W25R256FV, W25M256JV, MT25QU128ABA1ESE	22-Mar-2017
4.8.4	Reorganized part list and added "Size" column. Added: MX25L25635F, MX25L25645G, MX25U25645G, IS25LP256D, IC25LP256D, IS25WP256D, IC25WP256D, IS25WP080D, IS25LP080D, IS25WP016D, IS25LP016D, IS25WP032D, IS25LP032D, MX25U51245G Removed: IC25WP256A, IC25LP256A, IS25LP256A	5-May-2017
4.8.5	Changed notes on Micron parts. Added: MT25QL128ABA, MT25QU128ABA, MT25QU256AB	16-June-2017
4.8.6	Added new vendor: XMC Added: XM25QH64A, XM25QH128A, XM25QU64A, XM25QH32B	7-July-2017
4.8.7	Part Correction: W25Q257FV to W25Q256FV	19-July-2017
4.8.8	Parts removed due to incompatibility with Intel firmware: W25M256JV, W25M512JV	16-Aug-2017
4.8.9	Added: GD25Q80C, GD25B16C, GD25Q16C, GD25B32C, GD25Q32C, GD25Q64C, GD25LQ128D, GD25Q128C, GD25B256D, GD25LQ256D, IS25LP128F, IS25WP128F Adding new note: GD25B16B, GD25B32B, GD25B64B, GD25R64B, GD25LB128C, GD25LQ256C	11-Sep-2017
4.9.0	Name update: EN25QH16A (2T), EN25QH32A (2T), EN25QH256 (2T), EN25QH128A (2T), EN25QH64A (2T), EN25QH80 (2T), EN25QH64 (2T), EN25Q40A (2T), EN25Q80B (2T), EN25S64 (2T), EN25S64A (2T), EN25S10A (2T), EN25S20A (2T), EN25S40A (2T), EN25S80A (2T), EN25S32 (2T), EN25QH16 (2T), EN25QH32 (2T), EN25QH128 (2T) Added: MX77L25650F, MX25L12833F, MX25L12873F, MX25L51273G, GD25R127D, GD25R256D ES, W25Q128JV-DTR, W25Q32JW, W25R256JV, W25R256JW, W25Q257JV	30-Jan-2018
4.9.1	Name Update: EN25S10A, EN25S20A, EN25Q40A, EN25S40A, EN25Q80B, EN25QH16A, EN25QH32A, EN25QH64A, EN25S64A Added: EN25F10A, EN25F20A, EN25S80B (2S), EN25Q80C (2A), EN25QH16B (2A), EN25S16B (2S), EN25QH32B (2B), EN25QH32B (2C), EN25QH64A (2YC), EN25S64A (2SC), EN25QH128A (2T), EN25QH128A (2TC)	2-Feb-2018



Revision Number	Description	Revision Date
4.9.2	Added: XM25QH256B, XM25QU256B, XM25QH128C, XM25QU128C, XM25QH16B, XM25QH80B, XM25QH40B, XM25QH20B	30-Mar-2018
4.9.3	Added: W25Q256JV, W25Q256JW, W25R128JV, W25Q64JV, W25Q32JV, W25Q32JW, W25Q16JV	25-Apr-18
4.9.4	Information Edit: W25Q32JV Added: W25Q256JV DTR, W25Q256JW DTR, W25Q64JV DTR, W25Q32JV DTR, W25Q32JW DTR, W25Q16JV DTR	2-May-18
4.9.5	General Reorganized Parts by Vendor and Part Name  Added: Winbond: W25Q128JW, W25Q128JW-DTR, W25R128FW, W25R128JW Macronix: MX77U12850F, MX77U25650F BOYA: BY25B128AS, BY25B64AS, BY25B32BS	23-July-2018
4.9.6	General  Added: Winbond : W25Q512JV	11-Dec-2018
4.9.7	General Added : ISSI: IS25WQ256G, IS25LQ256G Removed: N25Q128, N25Q032, N25Q064, N25Q016, N25Q128A, N25Q256A, N25Q064A11EF640E, N25Q064A11ESEA0F	10-Jan-2019
4.9.8	General  Adding: ESMT: EN25F10A (2NF), EN25S10A (2SQ), EN25F20A (2N), EN25S20A (2SF), EN25Q40B (2X), EN25S40A (2S), EN25S32A (2S), EN25QH256A (2RC) Gigadevice: GD25B32C, GD25B32B, GD25Q127C, GD25LB256E, GD25LR128D  Micron: N25Q064A11EF640E, N25Q064A11ESEA0F (Moved to EOL) Parts listing EOL : EN25QH32A, EN25QH16A, N25Q064A11EF640E, N25Q064A11ESEA0F	26-Mar-2019
4.9.9	General  Adding: User Guide for Series 8 listings in Section 1.3. Macronix : MX77L12850F, MX77L6450F, MX25U25673G, and MX25V1035FM1I  Removed: Duplicate parts on VSCC DOC	03-May-2019
5.0.0	General  Adding: Zbit : ZB25LQ128A, ZB25VQ128A, ZB25LQ256A, and ZB25VQ256A Gigadevice : GD25LR256E Fudan : FM25W128  Correction to Device : "GD25R256D ES" corrected to "GD25R256D"	20-Aug-2019





Revision Number	Description	Revision Date
5.0.1	Maintenance Release:  Correction to Devices : From "ZB25L128A, ZB25V128A, ZB25L256A, and ZB25V256A" to "ZB25LQ128A, ZB25VQ128A, ZB25LQ256A, and ZB25VQ256A".	10-Sept-2019
5.0.2	General:  Adding : Gigadevice : GD25Q256D, GD25Q257D, GD25LB512ME, GD25LR512ME  Correcting Device: Macronix : MX77L25650F	13-Dec-2019



# 1 Introduction

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## 1.1 Overview

Vscommn.bin file contains the serial flash device's Vendor ID, Device ID, and vendor-specific component capabilities information. The Vscommn.bin file is used by Flash Image Tool (FITC) and MEManuf tool to select a serial flash device listed, to create flash image, and also to check if the Intel® Management Engine (Intel® ME) and BIOS VSCC customer created matches the VSCC entry in the vscommn.bin.

## 1.2 Terminology

Term	Description
SPI	Serial Peripheral Interface
VSCC	Vendor-Specific Component Capabilities
RPMC	Replay Protected Monotonic Counter

## 1.3 Reference Documents

Document	Document No./Location
Intel® 6 Series Express Chipsets SPI Programming Guide	445780 CDI/IBL
Intel® 7 Series Chipset and Intel® C216 Chipset SPI Programming Guide	475653 CDI/IBL
Intel® 8 Series Chipset Family SPI Programming Guide	560858 CDI/IBL
Lynx Point Chipset Intel® 8 Series Chipset Family SPI Programming Guide	485495 CDI/IBL
Broadwell Platform Controller Hub-Low Power (PCH-LP) – Serial Peripheral Interface (SPI) Programming Guide	523462 CDI/IBL
Skylake Platform Controller Hub-Low Power (PCH-LP) – Serial Peripheral Interface (SPI) Programming Guide	550696 CDI/IBL
SPI Flash Size Technical Update	606861 CDI/IBL



## **1.4 Platform Voltage Requirements**

Kaby Lake: Supports 1.8V and 3.3V

Coffee Lake: Supports 1.8V and 3.3V

Apollo Lake: Supports 1.8V

Ice Lake: Supports 1.8V and 3.3V

Gemini Lake: Supports 1.8V

Whiskey Lake: Supports 1.8V and 3.3V

Comet Lake: Supports 1.8V and 3.3V



## 2 Serial Flash Parts List

These settings are not part recommendations, nor are they an indication these parts are supported on Intel platforms. All parts on this list have NOT been validated, and it is the responsibility of the customer to validate the flash parts used on their platform.

Flash parts may change opcodes and architectures so please refer to the respective flash datasheet and errata/application note and flash vendor to confirm.

**Table 2-1. List of Serial Flash Devices Added to the VSCCOMMN.bin File**

Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Zbit	ZB25LQ128A	0x5E	5018h	0x2025	0x2021	128Mb	4
Zbit	ZB25VQ128A	0x5E	6018h	0x2025	0x2021	128Mb	
Zbit	ZB25LQ256A	0x5E	5019h	0x2025	0x2021	256Mb	4
Zbit	ZB25VQ256A	0x5E	6019h	0x2025	0x2021	256Mb	
XMC	XM25QH128A	0x20	7018h	0x2005	0x2001	128Mb	
XMC	XM25QH128C	0x20	4018h	0x2025	0x2021	128Mb	3
XMC	XM25QH16B	0x20	4015h	0x2025	0x2021	16Mb	3
XMC	XM25QH20B	0x20	4012h	0x2025	0x2021	2Mb	3
XMC	XM25QH256B	0x20	6019h	0x2045	0x2041	256Mb	3
XMC	XM25QH32B	0x20	4016h	0x2025	0x2021	32Mb	
XMC	XM25QH32B	0x20	4016h	0x2025	0x2021	32Mb	
XMC	XM25QH40B	0x20	4013h	0x2025	0x2021	4Mb	3
XMC	XM25QH64A	0x20	7017h	0x2005	0x2001	64Mb	
XMC	XM25QH80B	0x20	4014h	0x2025	0x2021	8Mb	3
XMC	XM25QU128C	0x20	4118h	0x2025	0x2021	128Mb	3,4
XMC	XM25QU256B	0x20	7019h	0x2045	0x2041	256Mb	3,4
XMC	XM25QU64A	0x20	3817h	0x2005	0x2001	64Mb	4
Winbond	W25M512JV	0xEFh	7119h	0x2025	0x2021	512Mb	3
Winbond	W25Q10EW	0xEFh	6011h	0x2025	0x2021	1Mb	4
Winbond	W25Q128FV	0xEFh	4018h	0x2025	0x2021	128Mb	3
Winbond	W25Q128FW	0xEFh	6018h	0x2025	0x2021	128Mb	3,4
Winbond	W25Q128JV	0xEFh	4018h	0x2025	0x2021	128Mb	3

## Serial Flash Parts List



Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Winbond	W25Q128JV-DTR	0xEFh	7018h	0x2025	0x2021	128Mb	3
Winbond	W25Q128JW	0xEFh	6018h	0x2025	0x2021	128Mb	3,4
Winbond	W25Q128JW-DTR	0xEFh	8018h	0x2025	0x2021	128Mb	4
Winbond	W25Q16CL	0xEFh	4015h	0x2025	0x2021	16Mb	
Winbond	W25Q16DV	0xEFh	4015h	0x2025	0x2021	16Mb	3
Winbond	W25Q16DW	0xEFh	6015h	0x2025	0x2021	16Mb	4
Winbond	W25Q16FW	0xEFh	6015h	0x2025	0x2021	16Mb	3,4
Winbond	W25Q16JL	0xEFh	4015h	0x2025	0x2021	16Mb	
Winbond	W25Q16JV	0xEFh	4015h	0x2025	0x2021	16Mb	3
Winbond	W25Q16JV	0xEFh	4015h	0x2025	0x2021	16Mb	3
Winbond	W25Q16JV-DTR	0xEFh	7015h	0x2025	0x2021	16Mb	
Winbond	W25Q20CL	0xEFh	4012h	0x2025	0x2021	2Mb	
Winbond	W25Q20EW	0xEFh	6012h	0x2025	0x2021	2Mb	4
Winbond	W25Q256FV	0xEFh	4019h	0x2025	0x2021	256Mb	3
Winbond	W25Q256FV	0xEFh	4019h	0x2025	0x2021	256Mb	3,4
Winbond	W25Q256JV	0xEFh	4019h	0x2025	0x2021	256Mb	3
Winbond	W25Q256JV	0xEFh	4019h	0x2025	0x2021	256Mb	3
Winbond	W25Q256JV-DTR	0xEFh	7019h	0x2025	0x2021	256Mb	
Winbond	W25Q256JW	0xEFh	6019h	0x2025	0x2021	256mb	3,4
Winbond	W25Q256JW	0xEFh	6019h	0x2025	0x2021	256Mb	3,4
Winbond	W25Q256JW-DTR	0xEFh	8019h	0x2025	0x2021	256Mb	4
Winbond	W25Q257JV	0xEFh	4019h	0x2025	0x2021	256Mb	3
Winbond	W25Q32FV	0xEFh	4016h	0x2025	0x2021	32Mb	3
Winbond	W25Q32FW	0xEFh	6016h	0x2025	0x2021	32Mb	3,4
Winbond	W25Q32JV	0xEFh	4016h	0x2025	0x2021	32Mb	3
Winbond	W25Q32JV-DTR	0xEFh	7016h	0x2025	0x2021	32Mb	
Winbond	W25Q32JW	0xEFh	6016h	0x2025	0x2021	32Mb	3,4
Winbond	W25Q32JW	0xEFh	6016h	0x2025	0x2021	32Mb	3,4
Winbond	W25Q32JW-DTR	0xEFh	8016h	0x2025	0x2021	32Mb	4



## Serial Flash Parts List

Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Winbond	W25Q40CL	0xEFh	4013h	0x2025	0x2021	4Mb	
Winbond	W25Q40EW	0xEFh	6013h	0x2025	0x2021	4Mb	4
Winbond	W25Q512JV	0xEFh	4020h	0x2025	0x2021	512Mb	3
Winbond	W25Q64FV	0xEFh	4017h	0x2025	0x2021	64Mb	3
Winbond	W25Q64FW	0xEFh	6017h	0x2025	0x2021	64Mb	3,4
Winbond	W25Q64JV	0xEFh	4017h	0x2025	0x2021	64Mb	3
Winbond	W25Q64JV	0xEFh	4017h	0x2025	0x2021	64Mb	3
Winbond	W25Q64JV-DTR	0xEFh	7017h	0x2025	0x2021	64Mb	
Winbond	W25Q80BL	0xEFh	4014h	0x2025	0x2021	8Mb	
Winbond	W25Q80DL	0xEFh	4014h	0x2025	0x2021	8Mb	
Winbond	W25Q80DV	0xEFh	4014h	0x2025	0x2021	8Mb	
Winbond	W25Q80EW	0xEFh	6014h	0x2025	0x2021	8Mb	3,4
Winbond	W25Q80JV	0xEFh	4014h	0x2025	0x2021	8Mb	3
Winbond	W25R128FV	0xEFh	4018h	0x2025	0x2021	128Mb	3,5
Winbond	W25R128FW	0xEFh	6018h	0x2025	0x2021	128Mb	3,4,5
Winbond	W25R128JW	0xEFh	6018h	0x2025	0x2021	128Mb	3,4,5
Winbond	W25R128JV	0xEFh	4018h	0x2025	0x2021	128Mb	3,5
Winbond	W25R256FV	0xEFh	4019h	0x2025	0x2021	256Mb	3,5
Winbond	W25R256JV	0xEFh	4019h	0x2025	0x2021	256Mb	3,5
Winbond	W25R256JW	0xEFh	6019h	0x2025	0x2021	256Mb	3,4,5
Winbond	W25R64FV	0xEFh	4017h	0x2025	0x2021	64Mb	3,5
Winbond	W25X05CL	0xEFh	3010h	0x2025	0x2021	512Kb	
Winbond	W25X10CL	0xEFh	3011h	0x2025	0x2021	1Mb	
Winbond	W25X20CL	0xEFh	3012h	0x2025	0x2021	2Mb	
Winbond	W25X40CL	0xEFh	3013h	0x2025	0x2021	4Mb	
Micron	N25Q064A11EF640E	0x20	BB17h	0x2005	0x2001	64Mb	1
Micron	N25Q064A11ESEA0F	0x20	BB17h	0x2005	0x2001	64Mb	1
Micron	MT25QL128ABA	0x20	BA18h	0x2005	0x2001	128Mb	

## Serial Flash Parts List



Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Micron	MT25QL256ABA1EW9-OSIT	0x20	BA19h	0x2005	0x2001	256Mb	
Micron	MT25QL512ABA	0x20	BA20h	0x2005	0x2001	512Mb	
Micron	MT25QU128ABA	0x20	BB18h	0x2005	0x2001	128Mb	
Micron	MT25QU128ABA1ESE	0x20	BB18h	0x2005	0x2001	128Mb	4
Micron	MT25QU256AB	0x20	BB19h	0x2005	0x2001	256Mb	1,4
Macronix	MX25L12873F	0xC2	2018h	0x2045	0x2041	128Mb	3
Macronix	MX25L25635E	0xC2	2019h	0x2045	0x2041	256Mb	2
Macronix	MX25L3273E	0xC2	2016h	0x2045	0x2041	32Mb	2,3
Macronix	MX25L51245G	0xC2	201Ah	0x2045	0x2041	512Mb	
Macronix	MX25L6445E	0xC2	2017h	0x2045	0x2041	64Mb	2
Macronix	MX25L6473E	0xC2	2017h	0x2045	0x2041	64Mb	2,3
Macronix	MX25L6475E	0xC2	2017h	0x2045	0x2041	64Mb	2,3
Macronix	MX25L8075E	0xC2	2014h	0x2045	0x2041	8Mb	2,3
Macronix	MX25U25635F	0xC2	2539h	0x2045	0x2041	256Mb	4
Macronix	MX25L12833F	0xC2	2018h	0x2045	0x2041	128Mb	
Macronix	MX25L12835F	0xC2	2018h	0x2045	0x2041	128Mb	
Macronix	MX25L12836E	0xC2	2018h	0x2045	0x2041	128Mb	2
Macronix	MX25L12850F	0xC2	2018h	0x2045	0x2041	128Mb	3,5
Macronix	MX25L12855E	0xC2	2618h	0x2045	0x2041	128Mb	2
Macronix	MX25L12865E	0xC2	2018h	0x2045	0x2041	128Mb	2
Macronix	MX25L12872F	0xC2	2018h	0x2045	0x2041	128Mb	3
Macronix	MX25L12873G	0xC2	2018h	0x2045	0x2041	128Mb	3
Macronix	MX25L12875F	0xC2	2018h	0x2045	0x2041	128Mb	2,3
Macronix	MX25L1636E	0xC2	2015h	0x2045	0x2041	16Mb	2
Macronix	MX25L1673E	0xC2	2415h	0x2045	0x2041	16Mb	3
Macronix	MX25L1675E	0xC2	2415h	0x2045	0x2041	16Mb	2,3
Macronix	MX25L25635F	0xC2	2019h	0x2045	0x2041	256Mb	
Macronix	MX25L25645G	0xC2	2019h	0x2045	0x2041	256Mb	



## Serial Flash Parts List

Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Macronix	MX25L25673G	0xC2	2019h	0x2045	0x2041	256Mb	3
Macronix	MX25L25735F	0xC2	2019h	0x2045	0x2041	256Mb	
Macronix	MX25L3273F	0xC2	2016h	0x2045	0x2041	32Mb	3
Macronix	MX25L3275E	0xC2	2016h	0x2045	0x2041	32Mb	2,3
Macronix	MX25L51273G	0xC2	201Ah	0x2045	0x2041	512Mb	3
Macronix	MX25L6436E	0xC2	2017h	0x2045	0x2041	64Mb	2
Macronix	MX25L6450F	0xC2	2017h	0x2045	0x2041	64Mb	3,5
Macronix	MX25L6455E	0xC2	2617h	0x2045	0x2041	64Mb	2
Macronix	MX25L6473F	0xC2	2017h	0x2045	0x2041	64Mb	3
Macronix	MX25L6495F	0xC2	9517h	0x2045	0x2041	64Mb	
Macronix	MX25L8036E	0xC2	2014h	0x2045	0x2041	8Mb	2
Macronix	MX25L8073E	0xC2	2014h	0x2045	0x2041	8Mb	3
Macronix	MX25U12835F	0xC2	2538h	0x2045	0x2041	128Mb	4
Macronix	MX25U12873F	0xC2	2538h	0x2045	0x2041	128Mb	3,4
Macronix	MX25U1635F	0xC2	2535h	0x2045	0x2041	16Mb	4
Macronix	MX25U25645G	0xC2	2539h	0x2045	0x2041	256Mb	4
Macronix	MX25U3235F	0xC2	2536h	0x2045	0x2041	32Mb	4
Macronix	MX25U3273F	0xC2	2536h	0x2045	0x2041	32Mb	3,4
Macronix	MX25U51245G	0xC2	253Ah	0x2045	0x2041	512Mb	4
Macronix	MX25U6435F	0xC2	2537h	0x2045	0x2041	64Mb	4
Macronix	MX25U6473F	0xC2	2537h	0x2045	0x2041	64Mb	3,4
Macronix	MX25U8033E	0xC2	2534h	0x2045	0x2041	8Mb	4
Macronix	MX66L51235F	0xC2	201Ah	0x2045	0x2041	512Mb	2
Macronix	MX77L25650F	0xC2	7519h	0x2045	0x2041	256Mb	3,5
Macronix	MX77U12850F	0xC2	7538h	0x2045	0x2041	128Mb	3,4,5
Macronix	MX77U25650F	0xC2	7539h	0x2045	0x2041	256Mb	3,4,5
Macronix	MX77L12850F	0xC2	7518h	0x2045	0x2041	128Mb	3,5
Macronix	MX77L6450F	0xC2	7517h	0x2045	0x2041	64Mb	3,5
Macronix	MX25U25673G	0xC2	2539h	0x2045	0x2041	256Mb	3,4



## Serial Flash Parts List



Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Macronix	MX25V1035FM1I	0xC2	2311h	0x2045	0x2041	1Mb	
ISSI	IC25LP064A	0x9D	6017h	0xD745	0xD741	64Mb	3
ISSI	IC25LP128	0x9D	6018h	0xD745	0xD741	128Mb	3
ISSI	IC25LP256D	0x9D	6019h	0xD745	0xD741	256Mb	
ISSI	IC25WP064	0x9D	7017h	0xD745	0xD741	64Mb	3,4
ISSI	IC25WP064A	0x9D	7017h	0xD745	0xD741	64Mb	3,4
ISSI	IC25WP128	0x9D	7018h	0xD745	0xD741	128Mb	3,4
ISSI	IC25WP256D	0x9D	6019h	0xD745	0xD741	256Mb	4
ISSI	IS25LP016D	0x9D	6015h	0xD745	0xD741	16Mb	3
ISSI	IS25LP032D	0x9D	6016h	0xD745	0xD741	32Mb	3
ISSI	IS25LP064A	0x9D	6017h	0xD745	0xD741	64Mb	3
ISSI	IS25LP080D	0x9D	6014h	0xD745	0xD741	8Mb	3
ISSI	IS25LP128	0x9D	6018h	0xD745	0xD741	128Mb	3
ISSI	IS25LP128F	0x9D	6018h	0xD745	0xD741	128Mb	3
ISSI	IS25LP256D	0x9D	6019h	0xD745	0xD741	256Mb	
ISSI	IS25WP016D	0x9D	7015h	0xD745	0xD741	16Mb	3,4
ISSI	IS25WP032D	0x9D	7016h	0xD745	0xD741	32Mb	3,4
ISSI	IS25WP064	0x9D	7017h	0xD745	0xD741	64Mb	3,4
ISSI	IS25WP064A	0x9D	7017h	0xD745	0xD741	64Mb	3,4
ISSI	IS25WP080D	0x9D	7014h	0xD745	0xD741	8Mb	3,4
ISSI	IS25WP128	0x9D	7018h	0xD745	0xD741	128Mb	3,4
ISSI	IS25WP128F	0x9D	7018h	0xD745	0xD741	12Mb	3,4
ISSI	IS25WP256A	0x9D	7019h	0xD745	0xD741	256Mb	3,4
ISSI	IS25WP256D	0x9D	6019h	0xD745	0xD741	256Mb	4
ISSI	IS25WQ256G	0x9D	7019h	0xD745	0xD741	256Mb	4
ISSI	IS25LQ256G	0x9D	6019h	0xD745	0xD741	256Mb	
Gigadevice	GD25B127D	0xC8	4018h	0x2025	0x2021	128Mb	3
Gigadevice	GD25B128C	0xC8	4018h	0x2025	0x2021	128Mb	3
Gigadevice	GD25B128C	0xC8	4018h	0x2025	0x2021	128Mb	3



## Serial Flash Parts List

Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Gigadevice	GD25B16B	0xC8	4015h	0x2025	0x2021	16Mb	1,3
Gigadevice	GD25B16C	0xC8	4015h	0x2025	0x2021	16Mb	3
Gigadevice	GD25B256C	0xC8	4019h	0x2025	0x2021	256Mb	3
Gigadevice	GD25B256D	0xC8	4019h	0x2025	0x2021	256Mb	3
Gigadevice	GD25B32B	0xC8	4016h	0x2025	0x2021	32Mb	1,3
Gigadevice	GD25B32C	0xC8	4016h	0x2025	0x2021	32Mb	3
Gigadevice	GD25B64B	0xC8	4017h	0x2025	0x2021	64Mb	1,3
Gigadevice	GD25B64C	0xC8	4017h	0x2025	0x2021	64Mb	3
Gigadevice	GD25LB128C	0xC8	6018h	0x2025	0x2021	128Mb	1,3,4
Gigadevice	GD25LB128D	0xC8	6018h	0x2025	0x2021	128Mb	3,4
Gigadevice	GD25LB256D	0xC8	6019h	0x2025	0x2021	256Mb	3,4
Gigadevice	GD25LB64C	0xC8	6017h	0x2025	0x2021	64Mb	3,4
Gigadevice	GD25LQ128D	0xC8	6018h	0x2025	0x2021	128Mb	4
Gigadevice	GD25LQ256C	0xC8	6019h	0x2025	0x2021	256Mb	1,4
Gigadevice	GD25LQ256D	0xC8	6019h	0x2025	0x2021	256Mb	4
Gigadevice	GD25LQ64C	0xC8	6017h	0x2025	0x2021	64Mb	3,4
Gigadevice	GD25Q128C	0xC8	4018h	0x2025	0x2021	128Mb	
Gigadevice	GD25Q16C	0xC8	4015h	0x2025	0x2021	16Mb	
Gigadevice	GD25Q256C	0xC8	4019h	0x2025	0x2021	256Mb	
Gigadevice	GD25Q32C	0xC8	4016h	0x2025	0x2021	32Mb	
Gigadevice	GD25Q64C	0xC8	4017h	0x2025	0x2021	64Mb	
Gigadevice	GD25Q80C	0xC8	4014h	0x2025	0x2021	8Mb	
Gigadevice	GD25R127D	0xC8	4018h	0x2025	0x2021	128Mb	3,5
Gigadevice	GD25R128C	0xC8	4018h	0x2025	0x2021	128Mb	3
Gigadevice	GD25R256D ES	0xC8	4019h	0x2025	0x2021	256Mb	3,5
Gigadevice	GD25R64B	0xC8	4017h	0x2025	0x2021	64Mb	1,3
Gigadevice	GD25R64C	0xC8	4017h	0x2025	0x2021	64Mb	3
Gigadevice	GD25B32C	0xC8	4016h	0x2025	0x2021	32Mb	3
Gigadevice	GD25B32B	0xC8	4016h	0x2025	0x2021	32Mb	3



Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Gigadevice	GD25Q127C	0xC8	4018h	0x2025	0x2021	128Mb	
Gigadevice	GD25LB256E	0xC8	4019h	0x2025	0x2021	256Mb	3
Gigadevice	GD25LR128D	0xC8	4018h	0x2025	0x2021	128Mb	3,5
Gigadevice	GD25LR256E	0xC8	6719h	0x2025	0x2021	256Mb	4,5
Gigadevice	GD25Q256D	0xC8	4019h	0x2025	0x2021	256Mb	
Gigadevice	GD25Q257D	0xC8	4019h	0x2025	0x2021	256Mb	
Gigadevice	GD25LB512ME	0xC8	671Ah	0x2025	0x2021	512Mb	3,4
Gigadevice	GD25LR512ME	0xC8	671Ah	0x2025	0x2021	512Mb	3,4,5
Fudan	FM25W128	0xA1	2818h	0x2025	0x2021	128Mb	4
EON / ESMT	EN25F10A	0x1C	3111h	0x2005	0x2001	1Mb	3
EON / ESMT	EN25F20A	0x1C	3112h	0x2005	0x2001	2Mb	3
EON / ESMT	EN25Q40A	0x1C	3013h	0x2005	0x2001	4Mb	3
EON / ESMT	EN25Q80B	0x1C	3014h	0x2005	0x2001	8Mb	3
EON / ESMT	EN25Q80C (2A)	0x1C	3014h	0x2005	0x2001	8Mb	3
EON / ESMT	EN25QH128	0x1C	7018h	0x2005	0x2001	128Mb	1,3
EON / ESMT	EN25QH128A (2T)	0x1C	7018h	0x2005	0x2001	128Mb	3
EON / ESMT	EN25QH128A (2T)	0x1C	7018h	0x2005	0x2001	128Mb	2,3
EON / ESMT	EN25QH128A (2TC)	0x1C	7018h	0x2005	0x2001	128Mb	3
EON / ESMT	EN25QH16	0x1C	7015h	0x2005	0x2001	16Mb	1,3
EON / ESMT	EN25QH16A	0x1C	7015h	0x2005	0x2001	16Mb	1,2,3
EON / ESMT	EN25QH16B (2A)	0x1C	7015h	0x2005	0x2001	16Mb	3
EON / ESMT	EN25QH256	0x1C	7019h	0x2005	0x2001	256Mb	1,3
EON / ESMT	EN25QH32	0x1C	7016h	0x2005	0x2001	32Mb	1,3
EON / ESMT	EN25QH32A	0x1C	7016h	0x2005	0x2001	32Mb	1,2,3
EON / ESMT	EN25QH32B (2B)	0x1C	7016h	0x2005	0x2001	32Mb	3
EON / ESMT	EN25QH32B (2C)	0x1C	7016h	0x2005	0x2001	32Mb	3
EON / ESMT	EN25QH64	0x1C	7017h	0x2005	0x2001	64Mb	1,3
EON / ESMT	EN25QH64A	0x1C	7017h	0x2005	0x2001	64Mb	2,3



## Serial Flash Parts List

Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
EON / ESMT	EN25QH64A (2YC)	0x1C	7017h	0x2005	0x2001	64Mb	3
EON / ESMT	EN25QH80	0x1C	7014h	0x2005	0x2001	8Mb	1,3
EON / ESMT	EN25S10A	0x1C	3811h	0x2005	0x2001	1Mb	3,4
EON / ESMT	EN25S16B (2S)	0x1C	3815h	0x2005	0x2001	16Mb	3,4
EON / ESMT	EN25S20A	0x1C	3812h	0x2005	0x2001	2Mb	3,4
EON / ESMT	EN25S32	0x1C	3816h	0x2005	0x2001	32Mb	1,3,4
EON / ESMT	EN25S40A	0x1C	3813h	0x2005	0x2001	4Mb	3,4
EON / ESMT	EN25S64	0x1C	3817h	0x2005	0x2001	64Mb	1,3,4
EON / ESMT	EN25S64A	0x1C	3817h	0x2005	0x2001	64Mb	3,4
EON / ESMT	EN25S64A (2SC)	0x1C	3817h	0x2005	0x2001	64Mb	3,4
EON / ESMT	EN25S80A	0x1C	3814h	0x2005	0x2001	8Mb	1,3,4
EON / ESMT	EN25S80B (2S)	0x1C	3814h	0x2005	0x2001	8Mb	3,4
EON / ESMT	EN25F10A (2NF)	0x1C	3111h	0x2005	0x2001	1Mb	
EON / ESMT	EN25S10A (2SQ)	0x1C	3811h	0x2005	0x2001	1Mb	
EON / ESMT	EN25F20A (2N)	0x1C	3112h	0x2005	0x2001	2Mb	
EON / ESMT	EN25S20A (2SF)	0x1C	3812h	0x2005	0x2001	2Mb	
EON / ESMT	EN25Q40B (2X)	0x1C	3013h	0x2005	0x2001	4Mb	
EON / ESMT	EN25S40A (2S)	0x1C	3813h	0x2005	0x2001	4Mb	
EON / ESMT	EN25S32A (2S)	0x1C	3816h	0x2005	0x2001	32Mb	
EON / ESMT	EN25QH256A (2RC)	0x1C	7019h	0x2005	0x2001	256Mb	
BOYA	BY25B64AS	0x68	4017h	0x2005	0x2001	64Mb	3
BOYA	BY25B128AS	0x68	4018h	0x2005	0x2001	128Mb	3
BOYA	BY25B32BS	0x68	4016h	0x2005	0x2001	32Mb	3
Adesto	AT25QF128	0x1F	7018h	0x2005	0x2001	128Mb	3
Adesto	AT25QF641	0x1F	3217h	0x2025	0x2021	64Mb	3
Adesto	AT25QL128A	0x1F	4218h	0x2025	0x2021	128Mb	3,4
Adesto	AT25QL321	0x1F	4216h	0x2025	0x2021	32Mb	3,4
Adesto	AT25QL641	0x1F	4317h	0x2025	0x2021	64Mb	3,4
Adesto	AT25SF128	0x1F	7018h	0x2005	0x2001	128Mb	



Vendor	Part Name	Vendor ID	Device ID	VSCC Value (64 Byte Write Granularity)	VSCC Value (1 Byte Write Granularity)	Size	Notes
Adesto	AT25SF641	0x1F	3217h	0x2025	0x2021	64Mb	
Adesto	AT25SL128A	0x1F	4218h	0x2025	0x2021	128Mb	4

**NOTES:**

1. End of life
2. Products replaced by new ones
3. Device boots up in Quad mode by default
4. SPI voltage is 1.8V
5. RPMC capable

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