

IMAGE INSTALLATION GUIDE

VAB-600

Linux EVK v1.2.1



Copyright

Copyright © 2016 VIA Technologies Incorporated. All rights reserved.

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise without the prior written permission of VIA Technologies, Incorporated.

Trademarks

All brands, product names, company names, trademarks and service marks are the property of their respective holders.

Disclaimer

VIA Technologies makes no warranties, implied or otherwise, in regard to this document and to the products described in this document. The information provided in this document is believed to be accurate and reliable as of the publication date of this document. However, VIA Technologies assumes no responsibility for the use or misuse of the information (including use or connection of extra device/equipment/add-on card) in this document and for any patent infringements that may arise from the use of this document. The information and product specifications within this document are subject to change at any time, without notice and without obligation to notify any person of such change.

VIA Technologies, Inc. reserves the right the make changes to the products described in this manual at any time without prior notice.



Revision History

Version	Date	Remarks
1.00	5/19/2016	Initial release



Table of Contents

1. Intr	oduction	
	Package Contents	
	Version Information and Supported Features	
1.2.	varsion information and supported readings	
2. Ima	ge Development	
	Booting from the eMMC	



1. Introduction

This Image Installation Guide explains how to boot the Linux EVK system image on the VAB-600 board in order to begin evaluating the platform.

1.1. Package Contents

The VAB-600_Linux_EVK_v1.2.1.zip file is a precompiled Debian image for evaluating the VAB-600 board.

1.2. Version Information and Supported Features

- U-Boot version: 1.1.4
- Kernel version: 3.0.8
- Evaluation image: Debian Wheezy 7.0
- Development based on VIA WM8950 Linux BSP 1.00.02 121212
- Supports eMMC (default) or Micro SD boot
- Supports HDMI or LVDS single display (default HDMI output)
- Supports HDMI audio output
- Supports Acmepoint TFT-LCD resistive touch panel (through 4-wire interface)
 Acmepoint 7" TP070C01 (800×480)
- Supports AUO LVDS resistive touch panel (through USB interface)
 AUO 22" G220SVN01.0 (1680×1050)
- Supports COM1 debug port
- Supports CIR
- Supports Line-Out and Mic-In
- Supports USB: keyboard, mouse, flash disk, hard disk, UVC camera
- Supports10M/100M Ethernet
- Supports EMIO-1533 USB Wi-Fi module
- Supports EMIO-2550 miniPCle Mobile Broadband module
- Supports Watchdog, GPIO, and RTC wake-up



2. Image Development

This section explains the setup requirements for booting from the eMMC.

2.1. Booting from the eMMC

The first step is to insert a Micro SD card into the host machine and create a FAT formatted partition. Next, extract the VAB-600_Linux_EVK_v1.2.1.zip file, and then copy the bspinst folder and the scriptcmd file onto the Micro SD card.

Insert the prepared Micro SD card into the VAB-600, connect an HDMI display, and power on the device to initiate the update process.

```
VIA Debian 7.0 Image and BSP Installation

Version - Update_Package_EMMC_VAB-600_Linux_BSP_V1.2.0.210.1

Board MAC ID:(00:1F:F2:0A:E7:9E)

Packages List:

W-Load - 0.11.00.00 (1G RAM Support)

U-Boot - 0.20.00.00 (Display Support v0.05)

Kernel - VAB-600_Linux_BSP_v0.07

FileSystem - VAB-600_Debian_Xorg_LXDE_v0.04.tar.tgz

Packages - v1.2.0

0 %

creating partition table

Warnings! Please don't power off! Please wait...
```

Update process screen

When the update process is completed, remove the Micro SD card. The system will automatically shut down in 3 seconds.

Power on the VAB-600 board again, and wait for the login prompt to appear.

The default user name is *debian* and the password is *temppwd*.





1F, 531 Zhong-Zheng Road Xindian, Taipei, 23148 Taiwan

TEL: 886.2.2218.5452 FAX: 886.2.2218.5453 Email: embedded@via.com.tw

USA

940 Mission Court Fremont, CA 94539

TEL: 1.510.683.3300 FAX: 1.510.687.4654 Email: embedded@viatech.com

Japan

3-15-7 Ebisu MT Bldg. 6F Higashi, Shibuya-ku Tokyo 150-0011 Japan

TEL: 81.3.5466.1637 FAX: 81.3.5466.1638 Email: embedded@viatech.co.jp

China

Tsinghua Science Park Bldg. 7 No. 1 Zongguancun East Road Haiden District, Beijing, 100084 China

TEL: 86.10.59852288 FAX: 86.10.59852299 Email: embedded@viatech.com.cn

Europe

Email: embedded@via-tech.eu