Ampere™

Aptio® V Support for APM family of ARM64 SOC



AMI ADVANTAGE

AMI leverages its vast expertise in BIOS development by providing customers high-quality BIOS UEFI solutions. AMI's BIOS is built on its flagship UEFI firmware, Aptio® V and Aptio V is used for both x86 and ARM64 platforms. With its stable structure, proven code, speedy deployment, and seamless integration from x86 to ARM64 projects, the advantages of Aptio V ARM64 are clear.

Firmware developed for APM Merlin™ allows developers to accelerate their development cycles with features such as:

- Easy migration from x86 to ARM64
- Improved build structure by AMI for Aptio V and customer usability
- Superior Development Environment
- Superior Tools for ARM64
- Fully featured BIOS including highly customized BDS (Boot Device Selection) flow
- Production ready code, no IP licensing issues that comes with open source

OEM EMODULE CAPABILITIES

Creating an OEM eModule allows a customer to hook many portions of the BIOS for consistent changes across multiple projects. Reusing the OEM eModule in projects can almost completely customize the behavior of the BIOS for the OEM on all subsequent projects.

- Add custom drivers to the code
- Modify SDL parameters
- Change SMBIOS
- Change logos
- Change TSE behaviors
- Modify BDS and boot order behaviors
- NVRAM reset and defaults behaviors

GETTING STARTED WITH AMI APTIO FOR ARM64

AMI provides a complete <u>Getting Started Guide</u> with instructions on setting up your Linux or Windows build environment. This guide serves as a reference for engineers starting development on an ARM/ARM64 based platform and goes through the steps needed for creating a new ARM project based on the APM Merlin platform.

HIGHLIGHTS:

Key Aptio Features

- Fully compliant with UEFI 2.4 and EDKII
- Full ACPI 6.0 Support
- SMBIOS 3.0 Support
- IPMI 2.0
- TSE (Text Setup Engine) including Graphical Themes

Operating Systems Supported

- RHEL-SERVER 7.2
- CentOS 7.2
- Ubuntu 14.04 LTS
- SUSE Linux Enterprise Server 12 SP2 RC23

PCI Add-on Cards

- Cards with UEFI ARM64 Compliant Option ROMs
- Intel SSD 750 Series
- · Verified LSI, Aspeed, Mellanox Cards
- · Verified NVMe, AHCI and USB Cards

AMI Utilities

- AMIAFU
- AMIBCP
- AMISCE
- AMISDE
- ChangeLogo
- DMIEdit
- MMTool

