

1. Record Nr.	UNINA9910359058303321
Autore	Fezzi, Luca <1974- >
Titolo	Pompeo / Luca Fezzi
Pubbl/distr/stampa	Roma, : Salerno Editrice, 2019
ISBN	978-88-6973-376-5
Descrizione fisica	382 p. : carte geografiche ; 24 cm
Collana	Profili ; 83
Disciplina	937.05092
Locazione	FSPBC
Collocazione	Collez. 1598 (83) XIV M 51
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr.	UNINA9910293149803321
Autore	Zimmer Vincent
Titolo	Embedded Firmware Solutions [[electronic resource]] : Development Best Practices for the Internet of Things // by Vincent Zimmer, Jiming Sun, Marc Jones, Stefan Reinauer
Pubbl/distr/stampa	Springer Nature, 2015 Berkeley, CA : , : Apress : , : Imprint : Apress, , 2015
ISBN	1-4842-0070-5
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (215 p.)
Collana	The expert's voice in programming
Disciplina	004 005.18
Soggetti	Computer input-output equipment Software engineering Microprogramming Hardware and Maker Software Engineering/Programming and Operating Systems Control Structures and Microprogramming
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Contents at a Glance; Introduction; Chapter 1: Introduction; What Is Embedded Firmware?; Where Is Firmware?; What Do Firmware Engineers Do?; Firmware Preparation for New Hardware; The Mystery of Bits; Programming Guides; The Intel® Firmware Support Package; The Uniqueness of Embedded Firmware; The Choice of Firmware Stacks; Welcome to the Era of the Internet of Things; Technical Coverage in This Book; The Future of Firmware; Chapter 2: Firmware Stacks for Embedded Systems; Is a One-Size-Fits-All Solution Possible?; Microkernel; Real-Time Operating System (RTOS); Legacy BIOS Implementations of the UEFI FrameworkOpen Source Firmware Stacks; Proprietary Firmware Stacks; Make or Buy; The Advantages of Outsourcing; The Disadvantages of Outsourcing; In-House Development; Summary; Chapter 3: Intel® Firmware Support Package (Intel® FSP); The Intel FSP Philosophy; What Is in Intel FSP?; Intel FSP Binary Format; Sample Boot Flow; Locating the Entries of Intel FSP; The

Hard Way to Find Intel FSP APIs: Use Data Structure; The Easy Way to Find FSP APIs: Use Hard-Coded Constants; Programming Interface: The APIs of Intel FSP; TempRamInit; FsplnitEntry; NotifyPhase Intel FSP OutputAPI Execution Status; Temporary Memory Data HOB; Non-Volatile Storage HOB; Sample Code for Parsing HOBs; Customization of Intel FSP; Downloading Intel FSP; Microcode Patches; Relocating Intel FSP; Integration and Build; The Future of Intel FSP; What Is Coming in the Following Chapters; Chapter 4: Building coreboot with Intel FSP; The Introduction of coreboot; The Philosophy of coreboot; A Brief History; v1: 1999-2000; v2: 2000-2005; v2+: 2005-2008; v3: 2006-2008; 2008 LinuxBIOS Renamed "coreboot"; v4: 2009-2012; v4+: 2012-2014; Further Reading
Prerequisites for Working with corebootCommunity Organization; Git and Gerrit; Git Commit Messages; coreboot Sign-off Procedure; Developer's Certificate of Origin 1.1; Adding Your Sign-off; Working with the coreboot Community; coreboot Do's; coreboot Don'ts; Nonsource Binaries in coreboot; A Hands-on Example: Building coreboot for the MinnowBoard MAX Mainboard; Environment; Hardware: MinnowBoard MAX; MinnowBoard MAX Platform Details; Development Directory; Downloading Intel FSP; Installing Intel FSP; Downloading the coreboot Source; coreboot Toolchain; coreboot Commit Hooks
Creating a coreboot Development BranchBuilding the Mainboard; On the Menuconfig Menu; On the Chipset Menu; On the Devices Menu; Build; Summary of Commands; Flashing the ROM; Preparing the Flash Programmer; Flashing the ROM Image; coreboot Internals; Boot Stages; Additional Files; CBFS; An Example of CBFS; CBFS Size; Special Binaries; Boot Flow Using Intel FSP; Reset Vector and Bootblock; romstage; ramstage; Payload; coreboot Source; coreboot Device Tree; Chips and Devices; Device Tree Variables; A Device Tree Example; Chip Operations; Device Operations; coreboot Hardwaremain State Machine State Machine States

Sommario/riassunto

Embedded Firmware Solutions is the perfect introduction and daily-use field guide--for the thousands of firmware designers, hardware engineers, architects, managers, and developers--to Intel's new firmware direction (including Quark coverage), showing how to integrate Intel® Architecture designs into their plans. Featuring hands-on examples and exercises using Open Source codebases, like Coreboot and EFI Development Kit (tianocore) and Chromebook, this is the first book that combines a timely and thorough overview of firmware solutions for the rapidly evolving embedded ecosystem with in-depth coverage of requirements and optimization.
