

# **Advantech AE Technical Share Document**

Date	2020 / 1 / 21	Release Note	Internal External	
Category	■FAQ □SOP Related OS			
Abstract	Administrator and User password mechanism in AMI BIOS			
Keyword	BIOS, Administrator, User, password			
<b>Related Product</b>	All ASG Products			

## Brief Solution:

There are two accounts available in AMI BIOS, one is "Administrator" another is "User". The password setting always can be found in the Security page from BIOS setup. Minimum length for password is 3 words and maximum length is 20 words, passwords can include symbols such as @, #, %, \$......

Aptio Setup Ut Main Advanced Chipset <mark>Se</mark>	<mark>ility – Copyright (C) 2019 America</mark> <mark>scurity </mark> Boot Save & Exit	n Megatrends, Inc.
Password Description		Set Administrator Password
If ONLY the Administrator's then this only limits access only asked for when entering If ONLY the User's password is a power on password and m boot or enter Setup. In Setu have Administrator rights. The password length must be in the following range: Minimum length	to Setup and is Setup. is set, then this must be entered to up the User will 3	
Maximum length	20	++: Select Screen
Administrator Password		↑↓: Select Item
User Password		Enter: Select +/−: Change Opt. F1: General Help
HDD Security Configuration:		F2: Previous Values
P0:SQF-S25M8-64G-SAC		F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.18.	1263. Copyright (C) 2019 American M	Megatrends, Inc.



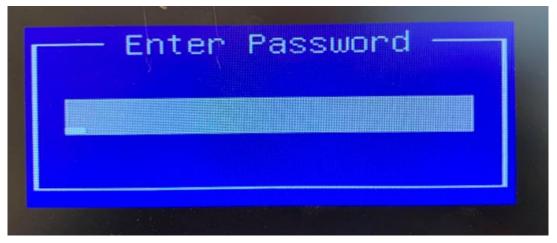
# Setting password for Administrator account:

If only the administrator's password is set, this only restricts access to the BIOS setup and requires a password only when entering the BIOS setup. If you does not press <del> the unit will boot normal without password prompt.

Aptio Setup Utility – Copyright (C) 2019 American Main Advanced Chipset <mark>Security</mark> Boot Save & Exit	Megatrends, Inc.
Password Description	Set Administrator Password
If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup. If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights. The password length must be in the following range: Minimum length Maximum length	++: Select Screen
Administrator Password User Password	↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help
HDD Security Configuration: P0:SQF—S25M8—64G—SAC	F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
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If you press "Enter" without a password input when password prompt, you will enter BIOS setup with "USER mode" not Administrator mode.



When you are entering USER mode, you will see the Access Level on Main page shows "User". Also, most functions are not allowed when entering in USER mode(press enter when password prompt). USER mode can only access following functions:

- A. RTC Timer
- B. COM port settings
- C. USB configurations
- D. Boot options.

Aptio Setup Utility – Main Advanced Chipset Security	Copyright (C) 2019 American Boot Save & Exit	Megatrends, Inc.
BIOS Information BIOS Vendor Core Version Compliancy Project Version Build Date and Time Access Level	American Megatrends 5.0.1.2 0.42 x64 UEFI 2.6.0; PI 1.4 UND 2484000U060X216 01/08/2019 14:54:39 User	Set the Date. Use Tab to switch between Date elements.
Total Memory Memory Frequency	4096 MB 2133 MHz	
System Date System Time	[Tue 01/21/2020] [14:51:54]	<pre> ++: Select Screen  14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</pre>
Version 2.18.1263. C	opyright (C) 2019American M	egatrends. Inc.



USER mode can only access following functions, other functions will be grayed out and unavailable.

- A. RTC Timer
- B. COM port settings
- C. USB configurations
- D. Boot options.

				Utility -				American
	Main	Advanced	Chipset	Security	Boot	Save & E	xit	
Γ	CPU Co	nfiguratio	n					
		Configura						
ŀ	- Trusted Computing							
ŀ	► ACPI S	ettings						
ŀ	Embedded Controller Configuration							
þ	· IT8768E Super IO Configuration							
ŀ	· S5 RTC Wake Settings							
Ľ	· Intel TXT Information							
ŀ	► CSM Co	CSM Configuration						
	LISE Co.	nfiguratio	n					

Aptio Setup Utility - Copyright (C) 2020 American Main Advanced Chipset Security Boot Save & Exit System Agent (SA) Configuration PCH-IO Configuration

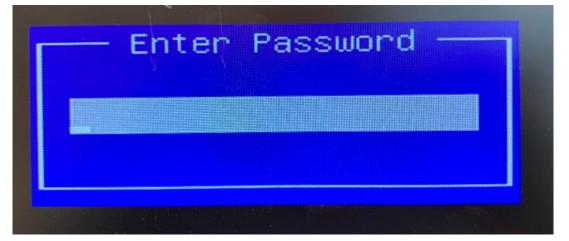


#### Setting password for USER account:

If only the user's password is set, the user will be prompted to enter the password when booting, and the password must be entered to boot or enter the BIOS setup.

Aptio Setup Utility Main Advanced Chipset Security	– Copyright (C) 2019 American Boot Save & Exit	Megatrends, Inc.			
Password Description If ONLY the Administrator's passwo then this only limits access to Se		HDD Security Configuration for selected drive			
only asked for when entering Setup If ONLY the User's password is set is a power on password and must be boot or enter Setup. In Setup the have Administrator rights.					
The password length must be in the following range: Minimum length	3				
Maximum length	20	→+: Select Screen			
Administrator Password User Password		↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help			
HDD Security Configuration: P0:SQF-S25M8-64G-SAC		F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit			
Version 2.18.1263. Copyright (C) 2019 American Megatrends, Inc.					

The user will be prompted for a password when booting, and the system will continue to boot only after entering the correct password



Note: if ONLY the USER password is set, and there is no Administrator password, USER will have Administrator authority in the BIOS.



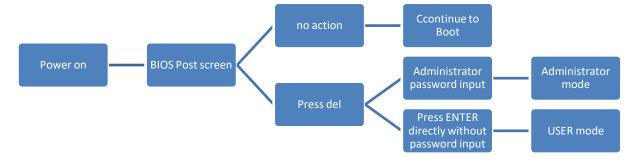
## Setting password for both Administrator & User account:

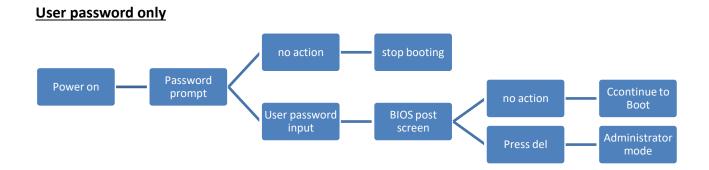
The user will be prompted for a password when booting, because the user password has been set. User can use both Administrator and User password to pass password checking when booting. And the BIOS access level will depend on what password user entered.

Set password for BIOS account	Require password to boot	Require password to access BIOS	BIOS setting change limitation	Press "Enter" without a password input when password prompt
None	NO	NO	NO	N/A
Administrator only	NO	Require Administrator password	NO	Enter BIOS with USER mode only COM / USB / RTC timer/ Boot options are avaliable
User only	Require entering USER password	NO (enter with Administrator mode)	NO (Administrator mode)	Unable to enter BIOS and OS
Administrator + User	Require entering Administrator or USER password	inistrator or USER Administrator password >> Administrator mode Administrator password >> Administrator mode		Unable to enter BIOS and OS

#### We summarize the behavior of Administrator and User account as below:

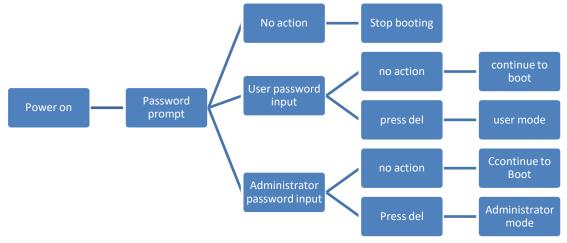
## Administrator password only







#### **Both Administrator & User password**



## Summary:

- Only Administrator password is set: Only affects entering the BIOS stage, need to enter password to enter BIOS.
- Only User password is set: You need to enter the password when the system is powered on. Setting user password does not affect BIOS access
- Administrator password and user password are set at the same time: You need to enter the password as soon as the system is powered on. The password can be Administrator or User. The password entered will affect the access to the BIOS.