

Windows 8 BIOS Setting VIG660W (PMPMS660)

The system is configured with following default BIOS settings for a Windows 8 64Bit Operating system. It is strongly recommended that these BIOS settings are not disabled for a Windows 8 64Bit Operating system.

Fast BOOT[Enabled]UEFI Boot[Enabled]Secure Boot[Enabled]

To enable downgrade to Windows 7 on this system the BIOS settings must be changed to boot into Legacy BIOS mode. Above BIOS settings should be changed to [Disabled]

Note

Please ensure the changes of the following settings are performed by personnel with some previous experience/knowledge of altering BIOS settings.

Accessing BIOS Setup

To access the BIOS, when the system is powered on repeatedly press the [DEL] key to access BIOS setup screen once the Windows 8 setup is complete to re-access the BIOS you will need to power down the system and wait 20 seconds before powering up the system; on power on Press the {DEL} key to access BIOS setup.

Enabling/Disabling Windows 8 Features

1. From the BIOS main menu select the 'Boot' tab.

BIOS Information BIOS Vendor BIOS Version Build Date and Time ME FW Version	American Megatrends TQ77G-S V0.16 03/20/2013 10:30:48 8.0.20.1513	Set the Date. Use Tab to switch between Date elements.
CPU Information		
Intel(R) Core(TM) i5-3470T CF	U @ 2.90GHz	
requency	2900 MHZ	
Stepping	El	
Memory Information		
Total Memory	4096 MB (DDR3)	
temory Frequency	1600 MHz	++: Select Screen
		11: Select Item
		Enter: Select
	[Fri 06/21/2013]	+/-: Change Opt.
System Time	[10:15:07]	F1: General Help
		F2: Previous Values
Access Level	Administrator	F3: Optimized Defaults
		F4: Save & Exit
		ESC: Exit

Viglen Limited, VHQ, 7 Handley Page Way, Old Parkbury Lane, Colney Street, St. Albans, Hertfordshire AL2 2DQ

Tel: 01727 201 850 | Fax: 01727 201858 | Email: technical@viglen.co.uk| Web: www.viglen.co.uk



2. In the 'Boot' tab **scroll down** the options to 'Fast Boot' and **select** this option. **Set** the 'Fast Boot' option to 'Enabled'.

Aptio Setup Ut Main Advanced Monitor Bo	ility – Copyright (C) 2012 American at Security Save & Exit	n Megatrends, Inc.
Aprio Setup Ut Main Advanced Monitor Bo Boot Configuration Setup Prompt Timeout Bootup NumLock State Full Screen Logo Fast Boot Option ROM Messages UEFI Boot Boot Option Priorities Boot Option #1 Boot Option #2 Boot Option #3 Boot Option #4 Boot Option #5 Boot Option #6 Boot Option #7 Boot Option #8	2 [On] [Enabled] [Disabled] [Disabled] [Disabled] [Baseled] [G [G [G [Baseric-SD/MMC 1.00] [Generic-MS/MS-Pro 1.00] [Po: SanDisk SSD U10] [IBA GE Slot 00C8 v1398] [Windows Boot Manager]	<pre>Enables or disables boot with initialization of a minimal set of devices required to launch active boot option. Has no effect for BBS boot options. ++: Select for BBS boot options. ++: Select Item Enter: Select t/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>

Fast Boot' - It is recommended that this option is **'Enabled'** for Windows 8 operating systems to ensure the boot up sequence is performed at the fastest possible time.

3. In the 'Boot' tab **scroll down** the options to 'UEFI Boot' and **select** this option. **Set** the 'UEFI Boot' option to 'Enabled'. For Windows 7 and Windows XP operating systems it should be set to Disabled.

Boot Configuration		Auto: If the 1st boot HDD is
Setup Prompt Timeout	2	GPT then enable UEFI boot
Bootup NumLock State	(0n)	options, otherwise disable. Enabled: Enable all UEFI boot
Full Screen Logo	[Enabled]	options. Disabled: Disabled
Fast Boot	[Enabled]	all UEFI boot options.
VGA Support	[EFI Driver]	
USB Support	[Full Initial]	
PS2 Devices Support	[Enabled]	
NetWork Stack Driver Support	[Disabled] UEFI Boot	
Option ROM Messages	Auto	
	Enabled Disabled	++: Select Screen
Boot Option Priorities		Enter: Select
Boot Option #1	[P1: TSSTcorp CDDVDW]	+/-: Change Opt.
Boot Option #2	[Generic-Compact Fla]	F1: General Help
Boot Option #3	[Generic-SM/xD-Pictu]	F2: Previous Values
Boot Option #4	[Generic-SD/MMC 1.00]	F3: Optimized Defaults
Boot Option #5	[Generic-MS/MS-Pro 1.00]	F4: Save & Exit
Boot Option #6	[PO: SanDisk SSD U10]	ESC: Exit
Boot Option #7	[IBA GE Slot 00C8 v1398]	
Boot Option #8	[Windows Boot Manager]	

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Enabling / Disabling Secure Boot

'Secure Boot' it is recommended this setting is set to **'Enabled'** to initialize the Windows 8 secure boot feature when the system boots up.

Note: Secure boot is supported under Windows 8 64Bit Operating system. This feature helps in preventing malicious software applications and "Unauthorized" operating systems from loading during the system start-up process.

To Enable Secure Boot

From the BIOS tab options **select** the 'Security' tab and **select the** 'Secure Boot' option, **Set** the 'Secure Boot' option to 'Enabled'

Aptio Setup Util: Main Advanced Monitor Boot	ity – Copyright (C) 2012 Amer Security Save & Exit	rican Megatrends, Inc.
Password Description		Secure Boot flow control.
The Administrator's password ha level.User's password and Pass only can be changed when Admin password is set.Administrator's the authority to uninstall user The password length must be	as the highest word Check istrator's s password has r password.	if System runs in User Mode
in the following range:		
Minimum length	3	
Maximum length	Disabled	
Huministrator Passoord	LIIADIEG	tt. Select Screen
User Fassword		tl: Select Item
Advision Description		Enter: Select
Administrator Password		Linter . Select
User Password	(0.4 m)	Fit Composit Hole
Password Check	[Setup]	F1: General neip
Sustem Hodo, state	Setup	E3: Ontimized Defaults
System Mode State	Dischlad	Ed. Save & Evit
Secure Boot State	Disabled	ESC: Exit
Secure Boot		
Version 2.15.12	27. Copyright (C) 2012 Americ	can Megatrends, Inc.



1. Once Secure Boot is **set** to 'Enabled' **scroll down** the active options from the Security Tab options and **Set** the Secure Boot Mode to 'Custom'

Password Description The Administrator's password level.User's password and Pas only can be changed when Admi password is set.Administrator the authority to uninstall us The password length must be in the following range:	has the highest sword Check nistrator's 's password has er password.	Secure Boot mode selector. 'Standard' – fixed Secure boot policy, 'Custom' – chengeable Image Execution policy and Secure Boot Key databases
Minimum length	3	
Maximum length	Secure Boot Mode	
Administrator Password User Password	Custom	++: Select Screen 11: Select Item
Administrator Password		Enter: Select
User Passuord		+/-: Change Opt.
Password Check	[Setup]	F1: General Help F2: Previous Values
Sustem Mode state	Setup	F3: Optimized Defaults
Secure Boot state	Disabled	F4: Save & Exit ESC: Exit
Secure Boot	[Enabled]	
Secure Boot Mode		

2. In Custom mode **scroll down** the active options in the Security Tab option list and **Select** the 'Key Management' Option

Aptio Setup Util Main Advanced Monitor Boot	ity – Copyright (C) 2012 An Security Save & Exit	merican Megatrends, Inc.
The Administrator's password hi level.User's password and Pass only can be changed when Admin password is set.Administrator's the authority to uninstall use The password length must be in the following range: Minimum length Maximum length	as the highest word Check istrator's s password has r password. 3 20	Key Management Page, allows for manual modification of the content of the Secure Boot variables
Administrator Password User Password Administrator Password User Password Password Check System Mode state Secure Boot state	Not Installed Not Installed [Setup] Setup Disabled	++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults
Secure Boot Secure Boot Secure Boot Mode Image Execution Policy Key Management	[Enabled] [Custom]	F4: Save & Exit ESC: Exit



3. In the Key management options select the 'Default Key Provisioning' option and Set to 'Enabled'

Default Key Provisioning Manage All Factory Keys (PK,KEK	(Disabled)	Force OEM default Secure Boot
Manage All Factory Keys (PK,KEK		The second secon
	,DB,DBX)	hogo if ogstom is in second hose
Install default Secure Boot keys	S	
Platform Key (PK)	NOT INSTALLED	
Set PK from File		
Get PK to File		
Delete the PK		
Key Exchange Key Database(KEK)	NOT INSTALLED	
Set KEK from File	—— Default Key Provisioning —	
Get KEK to File	Disabled	
Delete the KEK	Enabled	
Append an entry to KEK		: Select Screen
Authorized Signature Database(D		: Select Item
Set DB from File		Enter: Select
Get DB to File		+/-: Change Opt.
Delete the DB		F1: General Help
Append an entry to DB		F2: Previous Values
Forbidden Signature Database(DB)	X) NOT INSTALLED	F3: Optimized Defaults
Set DBX from File		F4: Save & Exit
Get DBX to File		ESC: EXIT
Delete the DBX		
Append an entry to DBX		

4. In the Key management options **select** the 'Install default Secure Boot Keys' option and **confirm** Installation in the prompt pop up to install the default secure Boot Keys.

Aptio Setup (Jtility – Copyright (C) 2012 Ame Security	erican Megatrends, Inc.
Default Key Provisioning Manage All Factory Keys (P Install default Secure Boo	[Enabled] (,KEK,DB,DBX) (keys	Force System to User Mode - install default Secure Boot Variables(PK,KEK,db,dbx). Change takes effect after reboot
Platform Key (PK) Set PK from File Get PK to File	NOT INSTALLED	10000
 Delete the PK Key Exchange Key Databas Set KEK from File Get KEK to File Delete the KEK Operation of the KEK 	——— Load Default Secure Variab Do you really wish to Install Default secure variables	Factory 5?
Authorized Signature Dat Authorized Signature Dat - Set DB from File - Get DB to File - Delete the DB	Yes No	Select F1: General Help
 Append an entry to DB Forbidden Signature Databa Set DBX from File Get DBX to File Delete the DBX 	Se(DBX) NOT INSTALLED	F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit



5. Once the Default Secure Boot keys are installed it will state 'Installed' as shown in below image

	Aptio Setup Utility -	- Copyright (C) 2012 American surity	Megatrends, Inc.
	Default Key Provisioning	(Enabled)	Force System to User Mode – install default Secure Boot
	Manage All Factory Keys (PK,KEK,DB, Install default Secure Boot keys	,DBX)	Variables(PK,KEK,db,dbx). Change takes effect after reboot
	Platform Key (PK) Set PK from File Get PK to File Delete the PK	INSTALLED	
	Key Exchange Key Database(KEK) Set KEK from File Get KEK to File	INSTALLED	
	Append an entry to KEK Authorized Signature Database(DB) Set DB from File	INSTALLED	<pre>++: Select Screen f↓: Select Item Enter: Select +/-: Change Ont</pre>
	Delete the DB Append an entry to DB Forbidden Signature Database(DBX)	INSTALLED	F1: General Help F2: Previous Values F3: Optimized Defaults
* * *	Set DBX from File Get DBX to File Delete the DBX		F4: Save & Exit ESC: Exit
•	Append an entry to DBX		
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Disabling Secure Boot

1. In the Key management options select 'Default Key Provisioning' and Set the option to 'Disabled'

DEM default Secure Boot F System is in Setup Mode	Default Key Provisioning [Enabled] Manage All Factory Keys (PK,KEK,DB,DBX) Install default Secure Boot keys Platform Key (PK) INSTALLED Set PK from File Get PK to File
ect Screen	Platform Key (PK) INSTALLED Set PK from File Get PK to File
ect Screen	Delete the PK
	Key Exchange Key Database(KEK) INSTALLED Set KEK from File Default Key Provision Get KEK to File Disabled Delete the KEK Enabled
lect Item Select hange Opt. heral Help	Authorized Signature Database(D > Set DB from File > Get DB to File > Delete the DB
evious Values timized Defaults ve & Exit kit	 Append an entry to DB Forbidden Signature Database(DBX) INSTALLED Set DBX from File Get DBX to File Delete the DBX Append an entry to DBX
evious Valu timized Def ve & Exit <it< td=""><td> Delete the DB Append an entry to DB Forbidden Signature Database(DBX) INSTALLED Set DBX from File Get DBX to File Delete the DBX Append an entry to DBX </td></it<>	 Delete the DB Append an entry to DB Forbidden Signature Database(DBX) INSTALLED Set DBX from File Get DBX to File Delete the DBX Append an entry to DBX

2. Select 'Clear Secure Boot Keys' and **confirm** Installation in the prompt pop up to clear the default secure Boot Keys.

Aptio Setup	Utility – Copyright (C) 2012 America Security	an Megatrends, Inc.
Default Key Provisioning Manage All Factory Keys (Clear Secure Boot Keys	[Disabled] PK,KEK,DB,DBX)	Force System to Setup Mode – clear all Secure Booot Variables. Change takes effect after reboot
Platform Key (PK) Set PK from File Get PK to File	INSTALLED	
Delete the PK	Reset Platform to Setup Mode	
Key Exchange Key Databas		
 Set KEK from File Get KEK to File Delete the KEK 	Do you really wish to reset Platfo Setup Mode?	rm to
Annend an entry to KEK		act Screen
Authorized Signature Dat	Yes No	ect Item
▶ Set DB from File		Select
▶ Get DB to File		ange Opt.
Delete the DB		F1: General Help
Append an entry to DB		F2: Previous Values
Forbidden Signature Datab	ase(DBX) INSTALLED	F3: Optimized Defaults
Set DBX from File		F4: Save & Exit
Get DBX to File		ESC: Exit
Delete the DBX		In the second
Append an entry to DBX		
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3. Once the secure Boot keys are cleared it will state 'Not Installed' as shown in below

Aptio Setup Utility .	– Copyright (C) 2012 America <mark>curity</mark>	n Megatrends, Inc.
Default Key Provisioning Manage All Factory Keys (PK,KEK,DB	(Disabled) ,DBX)	Force OEM default Secure Boot Keys if System is in Setup Mode
Install default Secure Boot keys Platform Key (PK) Set PK from File Get PK to File	NOT INSTALLED	
 Delete the PK Key Exchange Key Database(KEK) Set KEK from File Get KEK to File Delete the KEK 	NOT INSTALLED	
 Append an entry to KEK Authorized Signature Database(DB) Set DB from File Get DB to File Delete the DB 	NOT INSTALLED	<pre>++: Select Screen f4: Select Item Enter: Select +/-: Change Opt. F1: General Help</pre>
Append an entry to DB Forbidden Signature Database(DBX) Set DBX from File Get DBX to File Delete the DBX	NOT INSTALLED	F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
 Append an entry to DBX Version 2.15.1227. 	Copyright (C) 2012 American	Megatrends, Inc.

Press Esc to exit the Key provisioning Menu.

4. Select 'Secure Boot' and set the option to 'Disabled'



Once all BIOS settings have been configured press F4 key to Save and Exit the BIOS Setup.



Additional information:

For BIOS, Drivers and Documentation enquiries please contact Viglen Technical Support Department on technical@viglen.co.uk.

Remember to include your PC serial number in all correspondence.