

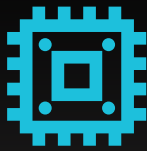
# AMD PRO SECURITY FOR RYZEN™ PRO

MULTILAYERED APPROACH FOR THE MOST MODERN SECURITY<sup>1</sup>



## MODERN, MULTILAYERED SECURITY

A multilayered set of security features at the **hardware, OS, and system level**. Ready to help defend against sophisticated attacks of today and tomorrow.



### HARDWARE & FIRMWARE

Security features from AMD built right into the silicon design



### OPERATING SYSTEM

AMD partners with OS providers like Microsoft to take OS security to the next level



### OEM SYSTEM

AMD collaborates closely with OEMs to enable and complete their security features

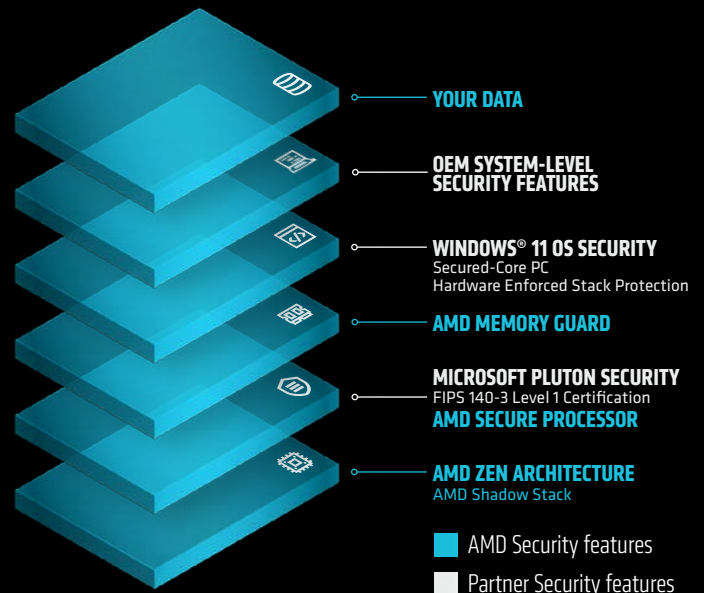
## AMD POWERED BUSINESS PCs

Exceeding the Latest Security Requirements

### AMD RYZEN™ PRO SERIES PROCESSORS

DELIVERING MULTI-LAYERED SECURITY FROM HARDWARE, OS TO THE SYSTEM LEVEL

- ✓ **AMD Memory Guard**  
Protecting a company's sensitive business data
- ✓ **Microsoft Pluton Security**  
Integrated security delivering chip-to-cloud protection
- ✓ **AMD Robust Security**  
AMD Secure Processor acts as a root of trust, enabling critical security features for OS providers and OEMs.



See endnote: GD-202, GD-206, GD-72

## SOLUTION HIGHLIGHTS

SECURITY LAYER	FEATURES	BENEFITS
<b>System</b>	<b>OEM SECURITY FEATURES</b>	Deep collaboration between OS and hardware providers with OEMs to complement and enable their enterprise-grade security features to protect sensitive data
<b>OS</b>	<b>WINDOWS® 11 SECURITY</b>	Windows 11 helps block software and firmware attacks from the moment you turn on your device. Full support for Secured-core PC initiative, Hardware Enforced Stack Protection, Advanced Threat Protection, Enhanced Sign-On, BitLocker and many more features at OS level
<b>Hardware &amp; Firmware</b>	<b>AMD ZEN ARCHITECTURE</b>	AMD “Zen” Core architecture with AMD Shadow Stack, a robust security approach to help protect against control-flow attacks
	<b>AMD SECURE PROCESSOR</b>	Dedicated security processor that validates code before it is executed to help ensure data and application integrity
	<b>MICROSOFT PLUTON SECURITY PROCESSOR<sup>2</sup></b>	A chip-to-cloud security technology designed and updated by Microsoft, that enhances security to the core of Windows 11 PCs with continuous protection for user credentials, identities, personal data, and encryption.
	<b>AMD MEMORY GUARD<sup>3</sup></b>	Delivers real time encryption of system memory for data-in-use protection and to help defend against physical attacks should your laptop be lost or stolen
	<b>AMD SHADOW STACK</b>	Robust security approach to help protect against control-flow attacks by checking the normal program stack against a hardware-stored copy and enabling Microsoft Hardware Enforced Stack Protection in Windows 11® security as part of a comprehensive set of AMD security features to help secure PCs
	<b>FIPS 140-3 LEVEL 1 CERTIFICATION</b>	Government encryption standard adopted by private sector as best practice for validating the security of cryptographic hardware

## GEN-TO-GEN AMD PRO SECURITY FEATURE COMPARISON

### AMD PRO Security Capabilities

	RYZEN™ PRO 7040 SERIES PROCESSORS	RYZEN™ PRO 8040 SERIES PROCESSORS	RYZEN™ AI PRO 300 SERIES PROCESSORS
<b>AMD “Zen” Architecture</b>	‘Zen 4’	‘Zen 4’	‘Zen 5’
<b>Integrated Microsoft Pluton Security Processor<sup>2</sup></b>	✓	✓	✓
<b>System Management Module (SMM-30)</b>	✓	✓	✓
<b>Other Features</b>	✓	✓	✓

1. RMP-20 ‘Most Modern Security’ is defined as AMD CPUs with Microsoft Secured-core PC - Modern Security technology enabled by the system manufacturer. Check with your system manufacturer prior to purchase. **RMP-20**  
 2. GD-202 Microsoft Pluton is a technology owned by Microsoft and licensed to AMD. Microsoft Pluton is a registered trademark of Microsoft Corporation in the United States and/or other countries. Microsoft Pluton security processor requires OEM enablement. Check with the OEM before purchase. AMD has not verified the third-party claim. **GD-202**  
 3. GD-206. Full system memory encryption with AMD Memory Guard is included in AMD Ryzen PRO, AMD Ryzen Threadripper PRO, and AMD Athlon PRO processors. Requires OEM enablement. Check with the system manufacturer prior to purchase. **GD-206**  
 4. GD-72. The AMD Secure Processor is a dedicated on-chip security processor integrated within each system-on-a-chip (SoC) and ASIC (Application Specific Integrated Circuit) designed by AMD. It enables secure boot with root of trust anchored in hardware, initializes the SoC through a secure boot flow, and establishes an isolated Trusted Execution Environment. **GD-72**