

# EXPLOSION OF NEW TECHNOLOGY DEMANDS

## NEW CAPABILITIES FOR NEXT-GEN COMBAT VEHICLES

- Hostile Fire Detection and Localization (HFDL)
- Aided Target Recognition / Detection (AiTR/ TD)
- Pre-Shot Detection
- Warfighter Machine Interface (WMI)
- Modular Active Protection System (MAPS)
- DVE & 360 SA
- SWIR EO/IR
- 3rd Gen FLIR
- Predictive Maintenance
- Mission-Specific Modular Configurations
- Electronic/Cyber Warfare (EW/CW)
- Unmanned Aerial Vehicles (UAVs)\*

## BASIC TENETS OF A COMBAT VEHICLE

**MOBILITY**  
**MANEUVERABILITY**  
**SURVIVABILITY**  
**LETHALITY**  
**SUPPORTABILITY**  
**INTEROPERABILITY**

## NEW ENABLING TECHNOLOGIES

- Artificial Intelligence (AI)
- Machine Learning
- Deep Learning
- General Purpose-Graphics Processing Unit (GP-GPU)
- Computer Vision
- High Performance Embedded Edge Computing (HPEEC)
- Neural Networks
- Sophisticated Electronics Architecture
- High Bandwidth Ethernet Networking