



STERLING HEIGHTS

DCS Facility



The Sterling Heights facility is a premier center for ground-vehicle engineering, fabrication, and system integration, advancing Army modernization across the Detroit Arsenal region. The site brings together expansive high-bay integration areas, modern engineering offices, configurable System Integration Labs, and specialized manufacturing spaces to enable rapid prototyping, assembly, and full-scale vehicle testing. Capabilities include comprehensive fabrication, electronics assembly, ruggedized component production, cable and harness manufacturing, and advanced machining supported by IPC-compliant processes and dedicated quality control. Engineers operate at ESD-safe stations with diagnostic tools to validate mission-critical hardware, while integrated logistics and sustainment services ensure systems remain mission-ready and optimized for the Warfighter.

ADVANCED ELECTRONIC SYSTEMS

- Mission-critical embedded and electronic system development
- Quick-Turn Custom hardware, controllers, and test devices
- High-reliability and safety-critical solutions

MECHANICAL, ELECTRICAL, AND INTEGRATED SYSTEMS DESIGN

- High-tempo electro-mechanical and system design with rapid transition to full vehicle integration
- Accelerated design and fabrication of ruggedized components, enclosures, and vehicle-installed hardware
- Human-centered, maintainable, and Quick-to-deployment focused designs

PROTOTYPING, INTEGRATION, AND SIMULATION

- Rapid prototyping from concept through functional hardware
- Modeling, simulation, and digital environment development to increase the speed of software development, testing, and deployment
- Support to unmanned, C4ISR, and advanced combat system programs

SOFTWARE DESIGN & DEVELOPMENT

- Software Security (RMF, STIGs, SCAP, eMASS)
- Process and Support (ESSP, CM, SQA, CI/CD pipelines)
- Formal, Qualification, and IV&V Testing (Automated Test Infrastructures)
- Software Fielding & Maintenance



STERLING HEIGHTS, MI

DCS's purpose-built Ground Vehicle Integration and Prototyping Facility in Sterling Heights expands our ability to design, fabricate, integrate, and sustain advanced automotive and ground-vehicle technologies.

- 63,000 ft² facility supporting engineering, SILs, and light manufacturing (~6 miles from DTA)
- 32,000 ft² Front Office area
 - Office and cubicle seating for 105 employees
 - 1,100 ft² Engineering Collaboration Area
 - 4 Reconfigurable SILs totaling 3,425 ft², with 60A 240V 3 Phase and 30A 240V Single Phase Connections
- 31,000 ft² Highbay area
 - 21,200 ft² of Vehicle Highbay floor space
 - Capacity for: 16 Strykers; 12 PLS; 14 Abrams; 18 Bradleys
 - Five 60A 240V 3 Phase Connections, Five 50A 240V Single Phase Connections
 - 2 Hobart GPU-400 400A @ 28VDC NATO Slave power (adding 3rd unit)
 - Nederman vehicle exhaust removal system, accommodating 3 simultaneous running vehicles
 - Compressed Air to All Stations
- 3,300 ft² cable fabrication and QC workspace, 3,100 ft² machine shop, 2,000 ft² stock room
 - One 10 Ton and three 5 Ton Overhead Cranes spanning Highbay
 - 5 Highbay Dock Doors (1) 16'x14', (3) 14'x14', (1) 10'x12'
 - Loading Dock with 8' x 10' Dock Door
- Cleared to store classified material up to the SECRET level



PROTOTYPING & SIMULATION SUPPORT

- Agile Software Development (GUI, Embedded, Unreal Engine)
- Modeling & Simulation - Physical and Software
- AI / ML Integration
- Unmanned Systems & C4ISR Platforms
- CAD Tools: CREO, SolidWorks, AutoCAD, Altium
- Onsite 3D Printing & Rapid Prototyping

HARDWARE & SYSTEMS ENGINEERING

- Component Design & Fabrication
- Electrical System Architecture
- Maintainability & Usability-Focused Designs
- Custom Cable Harness Design (MIL-spec and SIL Grade)
- Custom Device Enclosures
- Structural Weldments
- Physical User Interface Design
- Full System Assembly & Integration
- Realistic Cab Layouts & Interfaces for Pre-Deployment Familiarization

EMBEDDED SYSTEMS & ELECTRONICS

- FPGA & SoC Development
- Microcontroller-based Solutions (Basic to Advanced)
- Real-Time Embedded Controllers (RTOS)
- Analog + Digital Circuit Design
- Mixed-Signal & High-Reliability Applications
- Device Emulation / Stimulation
- Custom PCB Design, Populations, and Testing

