

The Silent, Unjammable Microchip Mesh Redefining Defence Operations

EPIC Semiconductors' Smart Dust delivers real-time zone awareness, timing sync, and environmental intelligence in the most denied, shielded, and EW-contested environments on Earth.



Vancouver, British Columbia Aug 29, 2025 ([Issuewire.com](https://www.issuewire.com)) - EPIC Semiconductors announces the deployment of Smart Dust — a breakthrough microchip mesh that brings to life what modern defence forces have long imagined: silent sensing, precision timing, and environmental awareness, fully operational in the world's most denied and disconnected environments — all while being battery-free, emission-free, and infrastructure-free.

Built and manufactured in Canada, Smart Dust consists of ultra-miniaturized, battery-free, and RF-free microchips that operate invisibly underground, underwater, through metal, and inside shielding. These AI-enabled chips form a self-organizing mesh that detects movement, tampering, and proximity — while silently synchronizing timing across nodes using ambient electric fields.

No antennas. No transmissions. No maintenance.
 Smart Dust redefines what’s possible at the tactical edge — where legacy systems go blind.

Where Smart Dust Operates When Nothing Else Can:

- GPS-Denied Environments — Delivers silent timing, zone transition alerts, and secure environmental logging
- EW-Contested Missions — Immune to jamming and spoofing; enables resilient timing mesh with no RF signature
- Critical Infrastructure — Detects thermal, physical, and electromagnetic anomalies with zero emissions
- Subterranean & Shielded Zones — Functions through dense materials, metal cages, and sub-zero conditions for decades
- Drone Pads & Radar Nodes — Senses stealth landings, zone crossings, and proximity to friendly or hostile assets

Stealth Intelligence for Denied Environments

Smart Dust was designed for the realities of modern warfare: GPS spoofing, jamming, infrastructure denial, and electromagnetic attack. It enables swarms of undetectable sensors to work in concert — silently, intelligently, and at scale — without requiring data links, batteries, or recharging.

This is not next-generation sensing.
This is now-generation survivability.

Smart Dust will be featured at **DSEI 2025** as part of Canada’s national defence innovation showcase.

To schedule a private demonstration or technical briefing, visit www.epic-semiconductors.com or contact info@epic-semiconductors.com.

Deployed Where Nothing Else Can Operate	
Mission Scenario	Smart Dust Role
GPS-Denied Environments	Silent timing mesh, zone transitions, environmental awareness, and secure event logging
Contested Missions	EW: RF-free, unjamnable timing mesh; resilient to spoofing and jamming
Critical Infrastructure	Detects physical, electromagnetic, and operational anomalies in mission-critical environments
Subterranean or Shielded Zones	Operates silently through dense materials, metal cages, and sub-zero conditions; supports century-scale passive sensing in buried or shielded environments without maintenance
Drone Pads and Radar Nodes	Detects stealth landings, zone crossings, and proximity to friendly or hostile assets without emissions

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