DUST Identity
(previously Diamond Nanotechnologies)

Boston, MA
www.dustidentity.com

SINCE ITS FOUNDING IN

2011

4 SBIR Awards

12 Employees

SB Socioeconomic Category

0 Patent from SBIR/STTR

Multifunctional Diamond Nanosensors Improves Supply Chain integrity

Supply chains represent one of the primary attack vectors in asymmetric warfare. The Diamond Unclonable Security Tag (DUST) prevents non-genuine parts from entering the supply chain and provides full lifecycle visibility for genuine components. When applied to a surface the DUST marking creates a unique, physically unclonable 'fingerprint' based on the configuration of quantum engineered nanoscopic diamonds. DUST validates that the design created is the one manufactured and that it has not been altered across their full lifecycle. The DUST system is composed of three primary elements —material, scanner, and application. The DUST Application can be deployed on-premises, in the cloud, or as part of a distributed architecture.

Material ↓ Scanner ↓ Application ↓

IMPACT TO MISSION

This physical-digital binding technology associates digital records with specific items ensuring a secure chain of custody and allowing global traceability with distributed ledger technologies (e.g., Blockchain).

BEYOND PHASE II

DUST Identity has obtained outside funding to continue development of its solution, completing a successful $12.3 million seed stage led by Kleiner Perkins with participation from Airbus Ventures, Lockheed Martin Ventures, New Science Ventures, Angular Ventures and Castle Island Ventures. The company is performing proof of concept studies and pilot operational deployments with several government branches and large prime government contractors.

Solicitation:

High-resolution, Ultra-sensitive Magnetic Imaging Using an Ensemble of Nitrogen-Vacancy (NV) Centers in Diamond

DARPA SBIR Sponsor
SB122-002 Topic Number
New Capability, Reliability Primary Innovation
Improved Performance Secondary Innovation

This research was developed with funding from the Defense Advanced Research Projects Agency (DARPA). The views, opinions and/or findings expressed are those of the author(s) and should not be interpreted as representing the official views or policies of the Department of Defense or the U.S. Government." (Approved for Public Release, Distribution Unlimited 8/29/19)