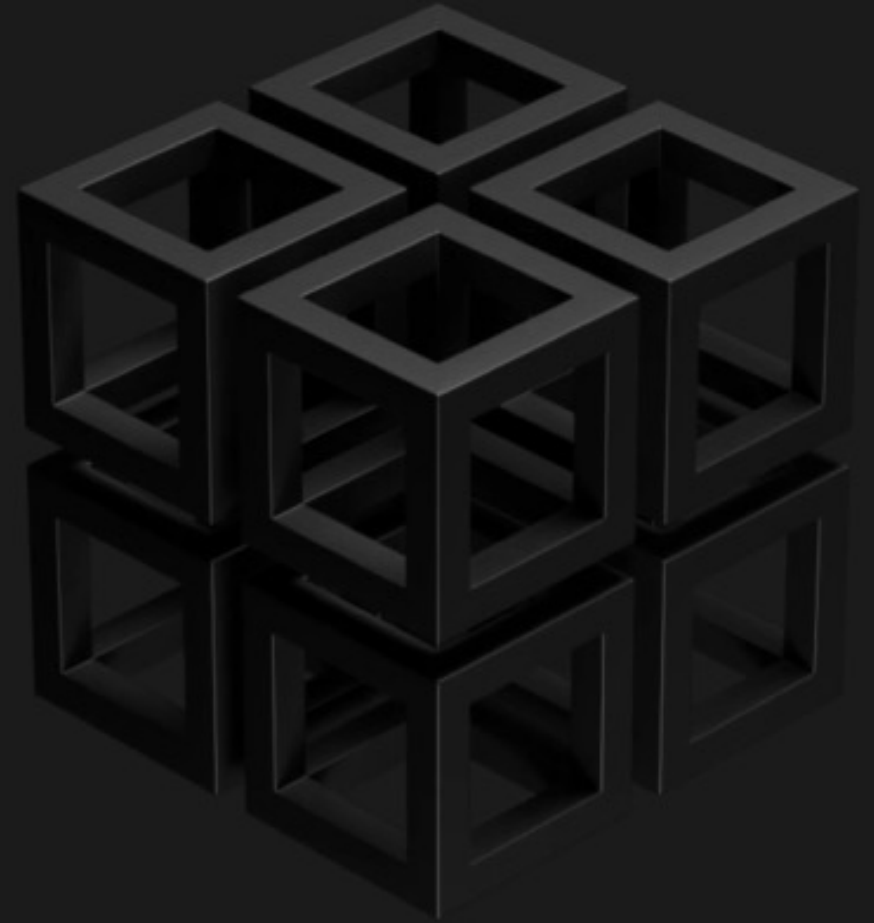# ambient
Scientific

Energy aware intelligence - From Edge to Cloud ™

Ambient Scientific
Company Profile

January 2026

About Ambient Scientific

We are **a fabless semiconductor company, building high performance low-power programmable AI processors**

| Headquartered in Santa Clara, California | Satellite office in Bangalore, India | 75+ Strong Team | 50+ Active customer programs | 10+ Ecosystem Partners |

Our Mission — To become the world's **leading AI compute platform** by bringing intelligence to every device—from the tiniest sensor to the most powerful server.

Our Vision — To enable a world where intelligent computing **enhances human lives without draining the planet.**
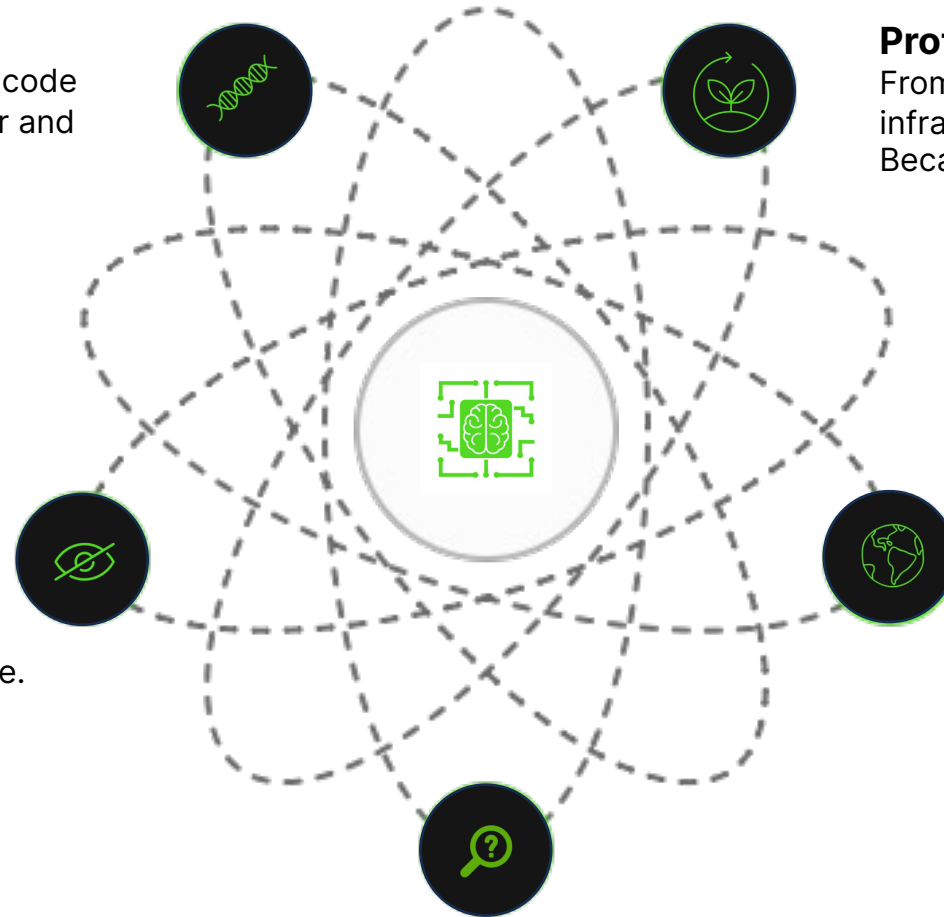
Core Values & Philosophy

Grounded in Science
We don't guess. We investigate. Every line of code and layer of silicon begins with scientific rigor and ends in measurable truth.

Protect What Powers Us
From the tiniest battery-powered device to global infrastructure, we build systems that do more with less. Because intelligence shouldn't cost the Earth.

Build for Everyone
We design technology that's powerful, affordable, and accessible—so it can improve lives at every level of society.

Chase the Impossible
We tackle the problems others say can't be solved—and build what's never existed before. We don't fear complexity—we're fueled by it.

Stay Curious. Stay Skeptical.
We question the rules until we understand the reasons. We ask the hard questions, challenge convention, and stay humble enough to keep learning.

Our Technology

DigAn™ - AI Native Compute Architecture

Ambient Scientific's breakthrough hybrid architecture DigAn™ leverages a combination of high-speed digital and analog circuit technologies to bring scalable, energy-aware AI – from tiny wearables to the most powerful cloud computers.

100X
AI Throughput

+ Max AI performance, minimum area

+ Unlock impossible AI on edge devices

+ Unleash next-gen foundational AI models

100X
Lower power consumption

+ AI compute efficiency up to 30 TOPs/W

+ Battery powered AI made possible
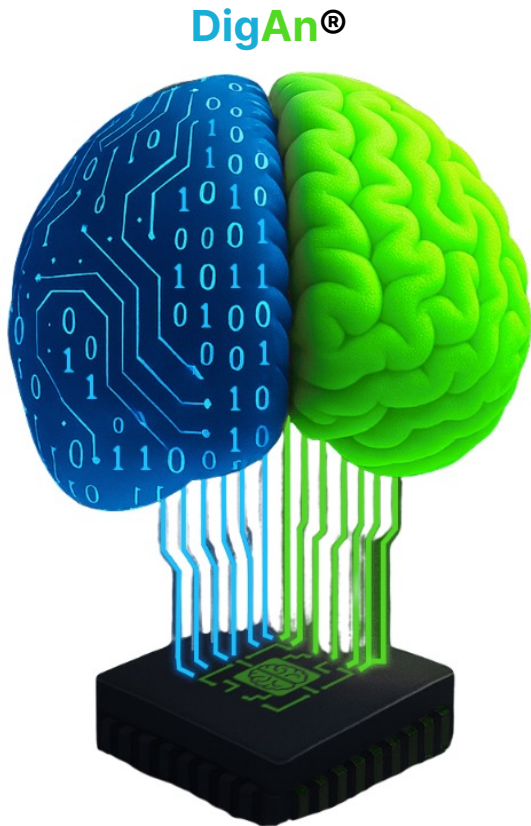
+ Data center thermal mgmt. simplified

100%
Programmable & Scalable

+ AI Processors from sensors to servers

+ Software defined processor control

+ Unified toolchain for seamless dev.

Ambient's DigAn™ Architecture: Energy Aware AI, Edge to Cloud

We didn't just shrink AI; we reimagined it. Breakthrough AI-native DigAn™ is our **hybrid digital-analog architecture** to bring intelligence, edge to cloud, and deliver best PPA. It's energy aware, compute aware & context aware.
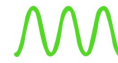
DigAn®

In-Memory Compute — Eliminates external DRAM shuttling; Compute & memory are fused to reduce energy per operation

Analog MACs — Analog compute drastically cuts inference cost, Energy per operation is 1/100 of digital MACs

Event Driven Activation — Energy aware clock cycles - circuits only activated when input patterns are meaningful

HW Sensor Fusion — HW layer SenseMesh™ filters signals before compute, for faster and leaner event driven AI
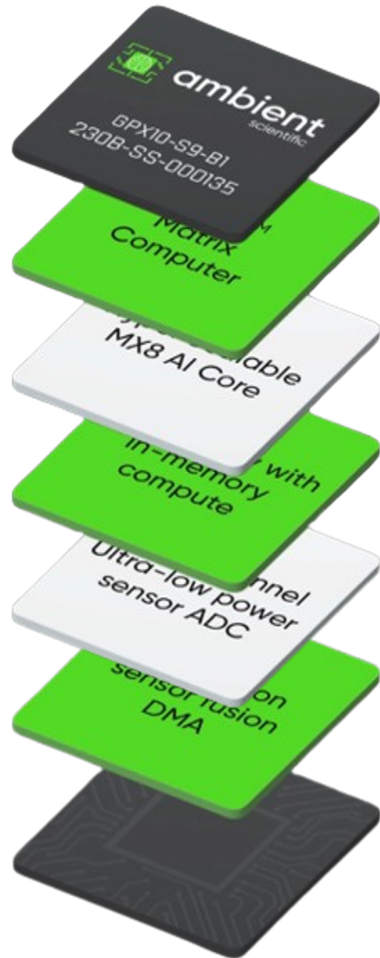
Software Aware Control — Software aware control to orchestrate low-level ops with minimal translation overhead

Our Secret Sauce

Deep technology portfolio with **100+ patents** granted & applied

Nebula™ is our unified toolchain that enables seamless AI application development

> Fully Programmable for evolving AI

> Unified toolchain from data collection to model deployment

> Supports changing AI topologies

Software & Toolchain innovation

SenseMesh™ integrates on-chip sensor-fusion & DVFS for truly always-on duty cycling.

> HW layer intelligent filter for lower power

> Multi-sensor fusion before inference

> Continuous adaptive frequency scaling

SOC Level innovation

CubicCore™ is the modular compute fabric that uses analog MACs embedded in SRAM
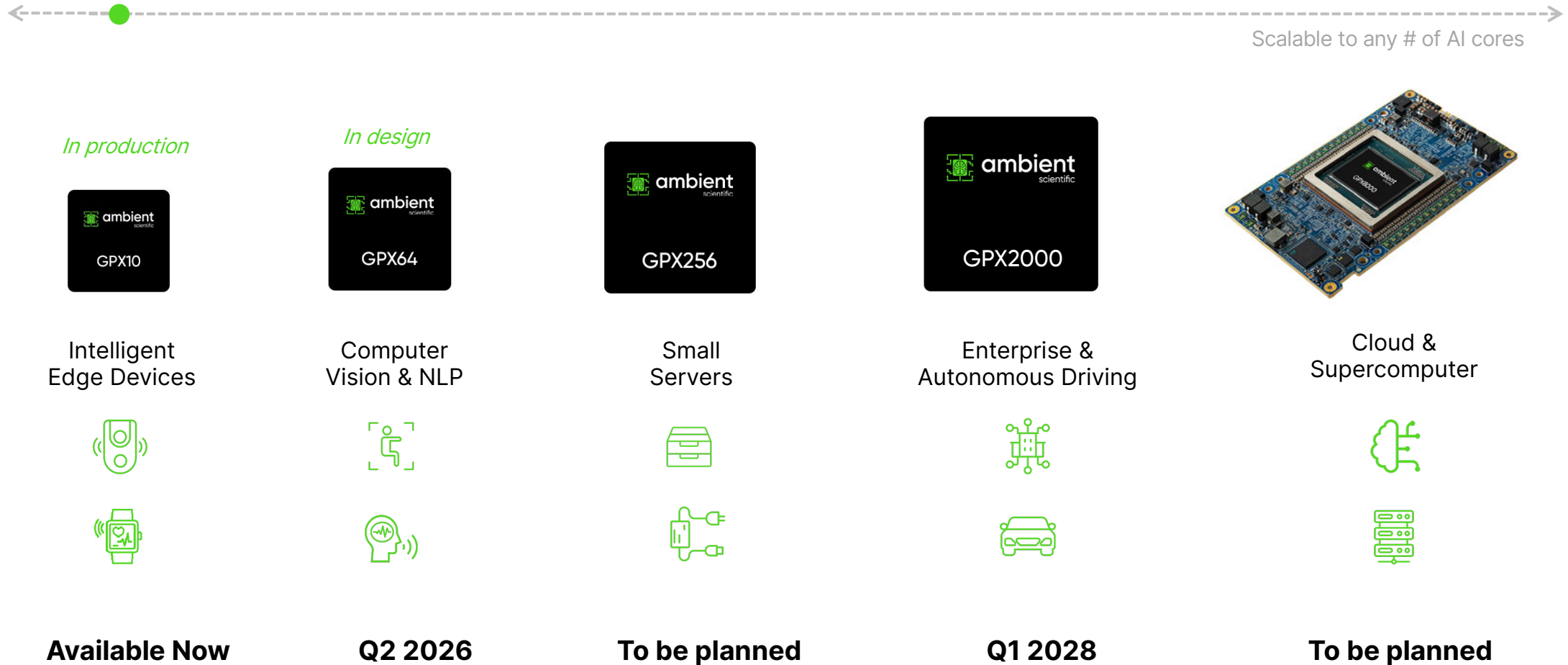
> In-memory analog compute

> Unmatched low power consumption

> Optimal scalability across workloads

Circuit & Architecture innovation

Our Product Roadmap

Complete silicon roadmap that scales with your software

Scalable to any # of AI cores

In production

In design

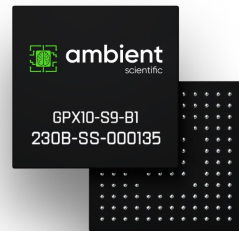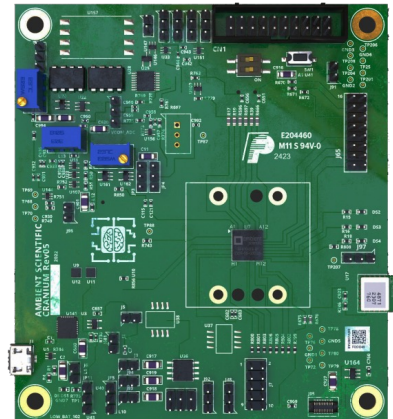| GPX10	GPX64	GPX256	GPX2000	
Intelligent Edge Devices	Computer Vision & NLP	Small Servers	Enterprise & Autonomous Driving	Cloud & Supercomputer
Available Now	**Q2 2026**	**To be planned**	**Q1 2028**	**To be planned**

Our Product Offerings

From chips to complete solutions—everything you need to **build breakthrough AI products, without the integration pain**
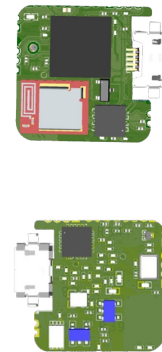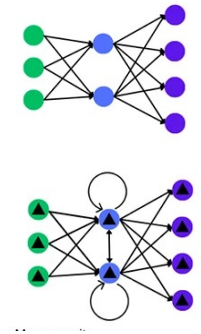
AI Processors

Development Kits

AI Application focused SOMs

Pre-trained AI Algorithms

+ **Accelerated Time to Market** – Skip integration hurdles and get to product faster

+ **Flexible Entry Points** – Whether you're building from scratch or customizing a proven solution

+ **Lower Development Overhead** – Hardware, software, and AI all tuned to work together

+ **Focus on Innovation** – Spend time creating differentiated products—not solving plumbing

Our Development Platform

We've built a complete, **end-to-end software stack and a thriving ecosys**tem to eliminate friction, accelerate time-to-market, and empower teams to focus on innovation, not integration.

Software Development Kit

	Ambient Training Toolchain
User Models	Ambient Model Library
ARM/RISC-V Compiler	GPX AI Compiler
OS / Drivers	BSP / HAL

Eclipse IDE

Familiar AI Tools
Train in TensorFlow, Keras, ONNX, etc.

Custom Toolchains
From data collection to AI customization

Drop-in model support
Convert models easily via AI compiler

Seamless application development
From OS to drivers on a familiar IDE

Onboarding & Community

Onboarding training

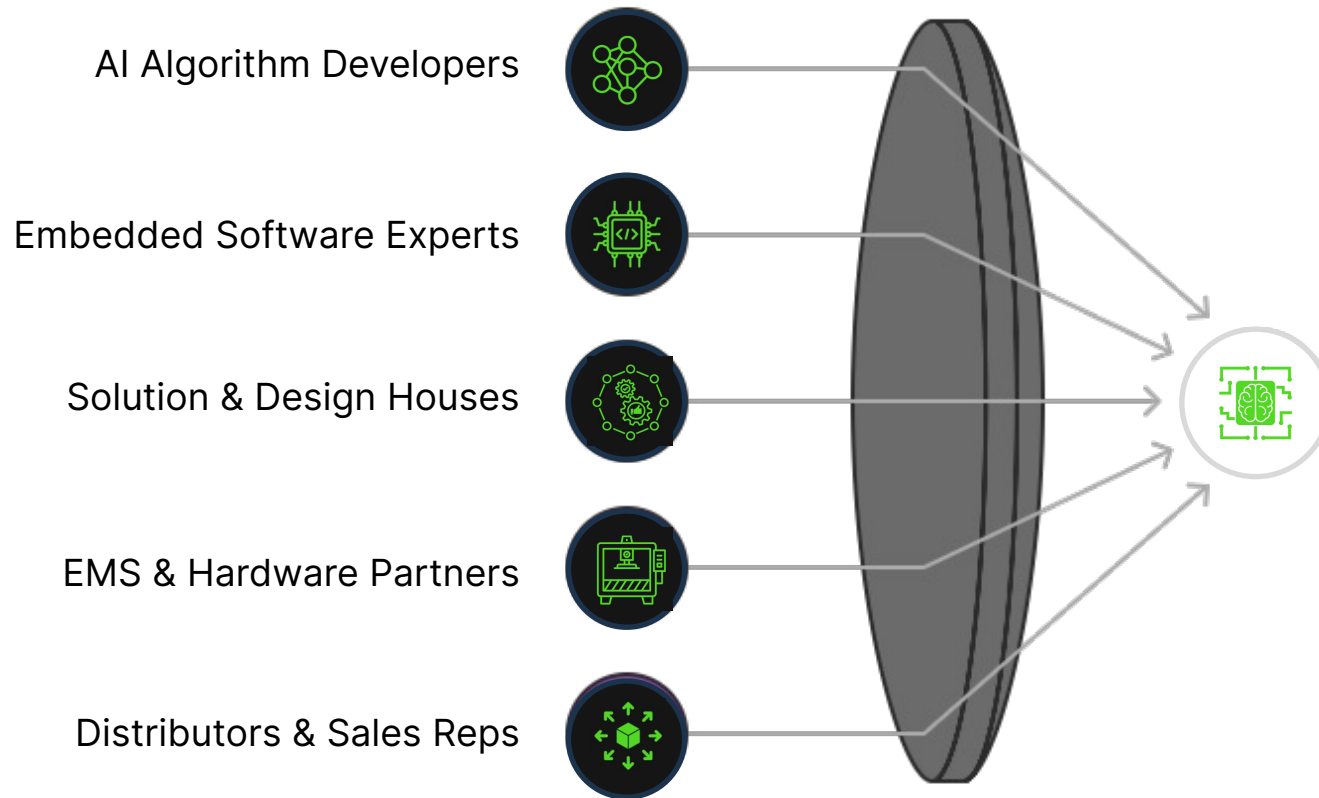Documentation & User Guides

Community discussion forums

Technical support requests

Product Enablement Ecosystem

A global ecosystem of trusted partners to help you **build faster, smarter, and with confidence**—wherever you are in your AI journey

AI Algorithm Developers

Embedded Software Experts

Solution & Design Houses

EMS & Hardware Partners

Distributors & Sales Reps

+ **Faster Time to Market** – Pre-qualified experts familiar with our platform

+ **Lower Development Risk** – Access to proven partners for every stage

+ **Regional Support** – Get help from specialists in your time zone and market

+ **Customizable, End-to-End Help** – From AI models to board bring-up to final product

+ **Scalable Growth Path** – Build with partners who can support prototyping to production

Our Global Partners

Our global partner network ensures that innovation travels faster—delivering local support wherever our customers build.

1 **Ambient Scientific Inc. Headquarters**
4633 Old Ironsides Dr, Santa Clara, CA 95054, United States

2 **Ambient Scientific India Pvt Ltd**
Ramky House, 1st Cross, Raghavendra Nagar, Kalyan Nagar, Bengaluru, Karnataka 560043

Authorized Distributors
Distribution network in Singapore, Malaysia, Thailand, Vietnam, India, Israel, Australia & New Zealand

Authorized Sales Representatives
Sales Rep network in Belgium, Netherlands, Luxembourg, Germany, Austria & Switzerland

Manufacturing Partner
Taiwan Semiconductor Manufacturing Company (TSMC)

Current Design Wins

Wearables

Distress Locket for fall and assault detection for elderly & high-risk

Fall detection

Automotive

Smart helmet for always-on voice detection and hands-free voice control

Voice Control

Wearables

Smart ring for classification of human activities & various fitness metrics

Human Activity Recognition

Industrials

Battery-powered camera + radar solution for human detection

Presence Detection

Industrials

Sensor-based battery-powered predictive maintenance module

Pred. Maintenance

-------------------------------- **Why GPX10?** --------------------------------

\+ Longer Battery   \+ Increased reliability   \+ Ultra portable on-device   \+ Biometric data security   \+ Near Zero Latency

Thank You!

GP Singh, CEO

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www.ambientscientific.ai