Technical Support
www.latticesemi.com/support



Lattice sensAI enables creating smart devices, aware of the user behavior, privacy and security needs. Low power FPGAs such as iCE40 UltraPlus run AI workloads based on small neural network models taking advantage of the flexible FPGA resources and customized CNN IPs to quickly add capabilities making devices aware of its surroundings using a wide variety of sensors.

The Lattice sensAI User Awareness Kit demonstrates how to enable entry and exit from low power modes based on the presence and departure of users. This saves valuable battery life and deliver the always on and ready to use experience.

# User Presence Awareness Kit

# QUICK START

## User Presence Awareness Kit

Next generation notebooks and PCs are acquiring low power AI capabilities to enable longer battery life and improve modern standby modes. Lattice sensAI provides always-on AI solutions running at 1 mW on flexible FPGA architecture. This kit is intended to demonstrate these capabilities.

This document provides a brief introduction and instructions for operating the User Presence Awareness Kit.

### KIT CONTENT

- Demo HW
- USB Cable
- Quick Start Guide (this document)

### DOWNLOAD THE DEMO APPLICATION

- Go to www.latticesemi.com/HPDkit
- Download LatticeHPD.exe

### RUNNING THE DEMO

- Plug the USB cable to the HW provided and the notebook
- Run LatticeHPD.exe from the download directory
- In the “UAR Port” menu select the UART port for the kit
- In the “image” menu select demo
- Click “Run Demo” box

### DEMONSTRATION

- When a user is present in front of the system, the screen stays at the user defined brightness and the demo application shows a green box with “User Detected”
- When the user departs the screen is turned off
- When the user comes back (present) the screen goes back on to the user defined brightness and the demo application shows a green box with “User Detected”