

# INTERA Falcon Product Brief

## Member of the Cognit AI Accelerator IP family

Our family of AI acceleration IP Cores enables efficient, battery-powered inference at the edge. Tailored for verticals like medical cognitive monitoring, this IP integrates seamlessly into FPGA, ASIC, and SoC solutions.

### Key Features & Benefits

- ULP AI accelerator operating under a battery powered budget constraint
- Designed for integration into diverse HW platforms: FPGA, ASIC, SoC solutions
- Seamless integration through widely adopted open-source frameworks
- Support for FC, DNN, MLP, CNN and LSTM neural networks
- Targeted at a wide range of vertical markets through support for multiple NN inference models
- Available through our (SDK) Starter Development Kit including: IP,samples, Devboard, Apps notes, User guide

### AI Acceleration on the Edge



**Always ON availability**  
Working in offline mode.



**Cost optimization**  
Avoid subscription for cloud-based AI tools.



**Data privacy**  
Sensitive data stays local, is not sent out to cloud.



**Low Latency**  
Real-time system performance.

INTERA  
Product  
Offering

FALCON  
AI  
ACCELERATION  
IP  
  
**SDK**

Third Party  
FPGA Dev  
Board

INTERA  
Dev  
Board



AMD  
Microchip  
ALTERA  
Lattice

FPGA or  
SoC Daughter  
Board

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### Comprehensive Software Suite

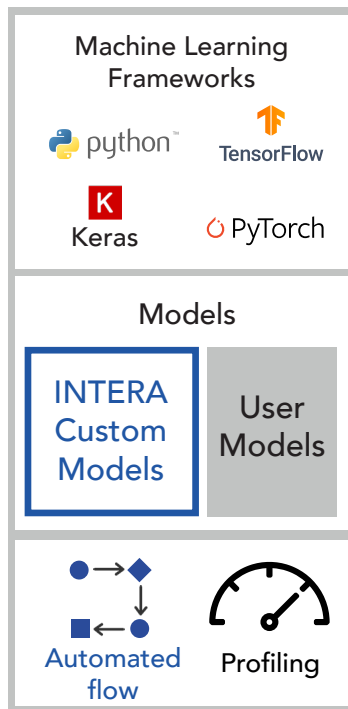
INTERA provides an open-source tool suite which seamlessly interoperates with existing deep learning development Frameworks.

Seamless integration with existing deep learning frameworks

Large variety of pre-trained benchmark models

Maximizing AI compute performance by efficient use of NN Core resources

#### Model Build Environment



#### Runtime Environment



IoT applications  
ULP applications  
Near sensor AI computing

INTERA SW component

Third Party SW component

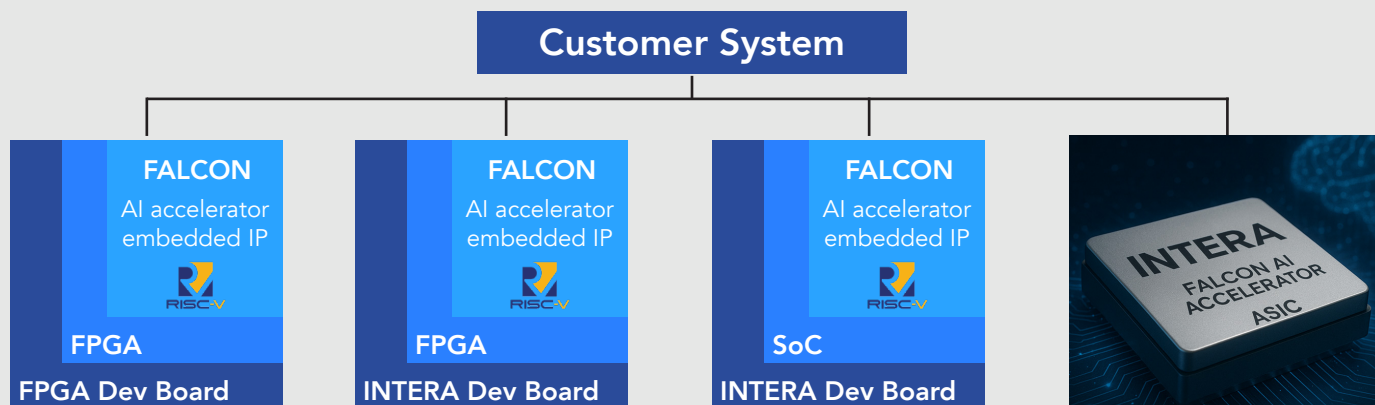
### Neural Network Models & Application Support

#### AI Frameworks

TensorFlow, TensorFlow Lite Keras, Pytorch<sup>(1)</sup> & ONNX<sup>(1)</sup>

Comprehensive dataflow compiler & open frameworks enable customers to easily port their CNN models or use INTERA custom one's

### Neural Network Model Verification & Inference



<sup>(1)</sup> Under development