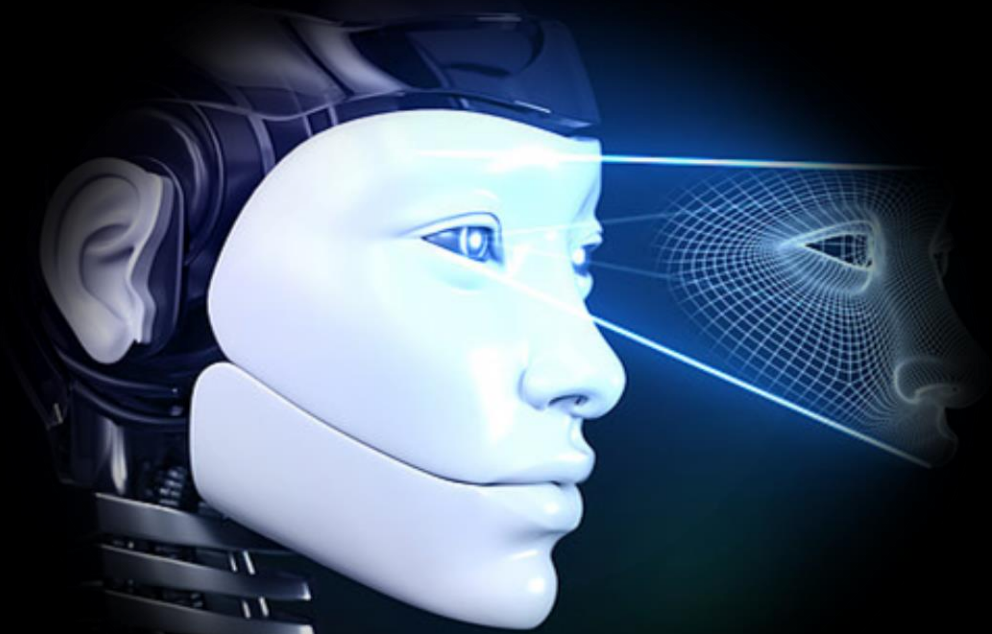
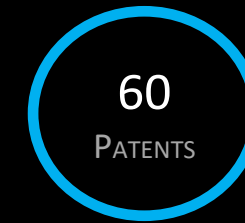




HUMAN CENTRIC VEHICLE INTELLIGENCE





PROVEN A.I. SOFTWARE FOR
AUTOMOTIVE EMBEDDED SYSTEM

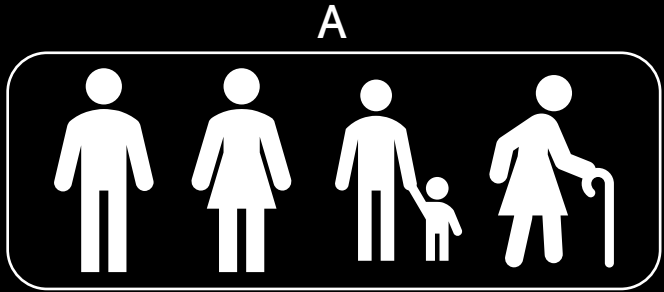




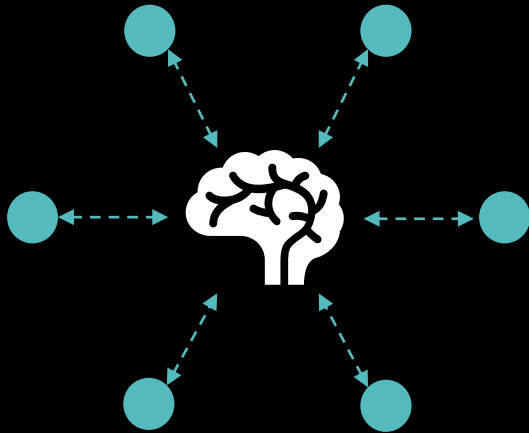
Mindtronic AI

THE TREND OF PERSONALIZED A.I.

Centralized Learning v.s. Adaptive Learning

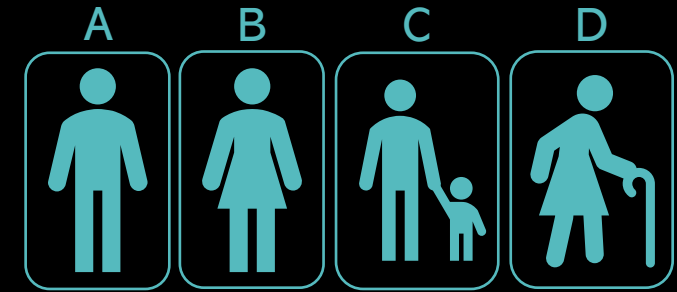


All users use same model

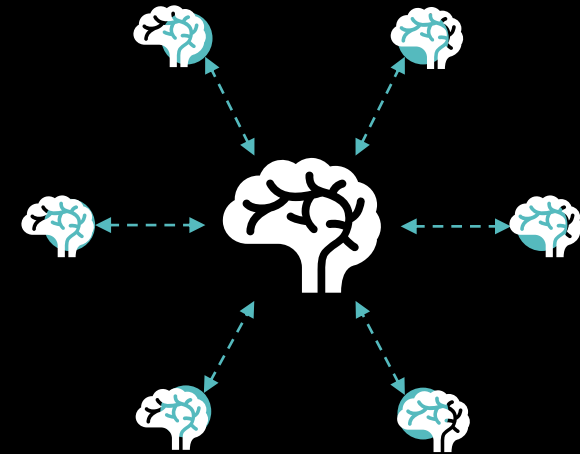


Cloud Learning

V.S.



Each user has personalized model



Edge Learning



Mindtronic AI

THE POWER OF BCNN

Framework to Enable Edge Learning and A.I. Acceleration



Tencent

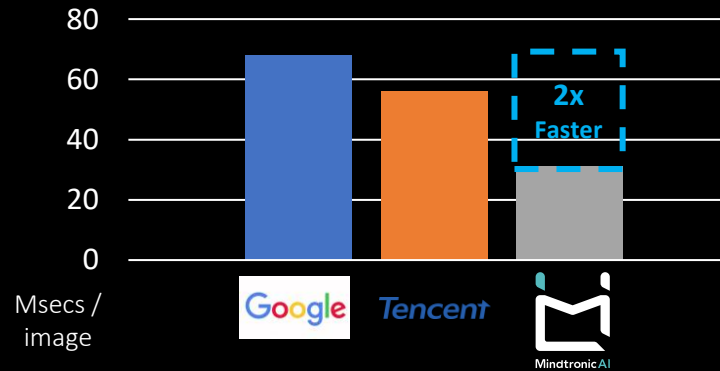


Edge computing	✓	✓	✓
Server training	✓	✗	✓
Edge training	✗	✗	✓

Enable
Edge Learning



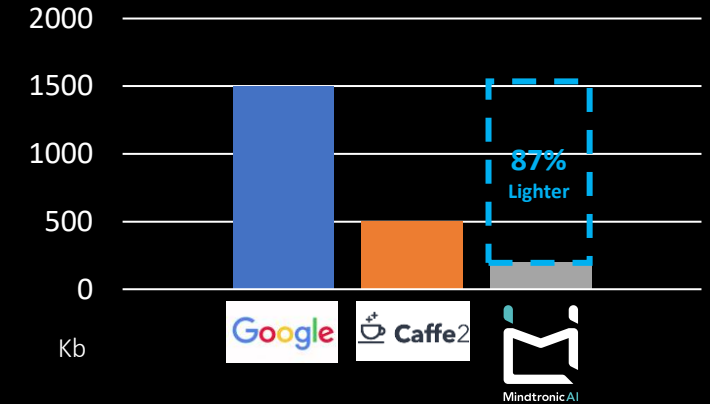
Speed of MobilenetV1 by Different Framework



Enable
Higher Speed



Memory Consuming of Keras by Different Framework



Enable
Lighter A.I.



Help Carmakers Save Over 50% of R&D Cost & Time



Sensors	IP - SDK	HMI	V2X	Autonomous
Camera - DMC	Face Identity	●		
	Emotion	●		
	Gaze Tracking	●		
+TOF	Pupil Tracking	●	●	
	Interest Point		●	
+Ambient	Driver Fatigue			●
	Driver Cognition			●
Camera - ADAS	Road Understanding		●	●

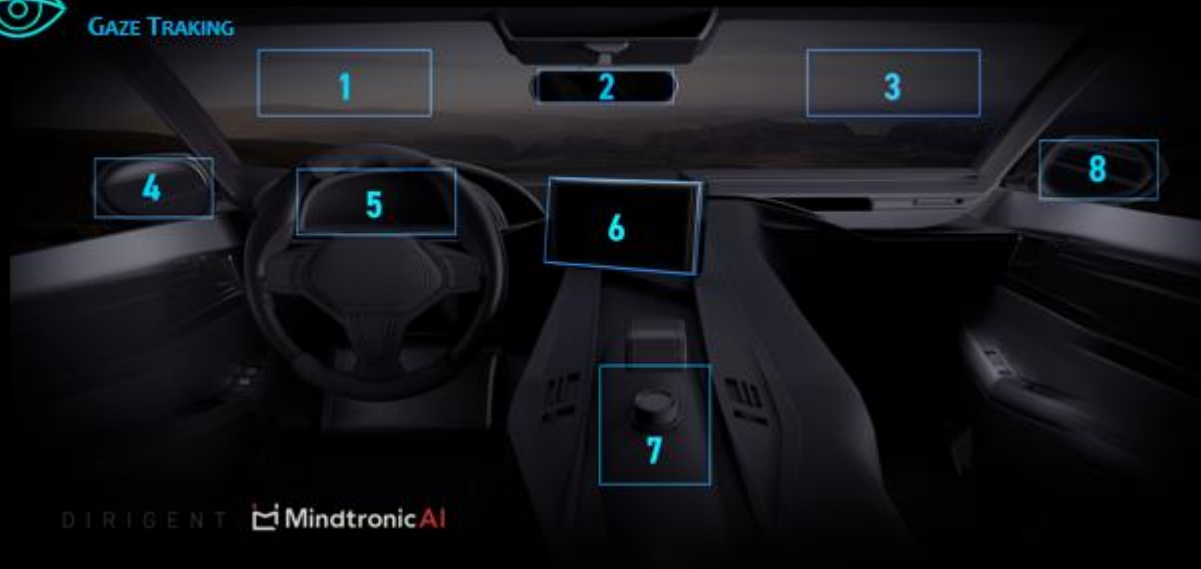


INTEGRATED DESIGN

- OS: QNX / Android / AGL / RTOS
- FHD LCD
- ECU / DCU embedded
- Built-in IR camera
- Built-in CAN / BT / Ethernet / GPS
- Support OTA



GAZE TRACKING



EMBEDDED A.I.

- Edge learning engine
- Face ID
- Driver Monitoring System
- Emotion detection
- Gaze tracking

HMI

- 3D motion PARALLAX
- Customized UI / UX

3D AR-HUD GAZE TRACKING



ROBUST

- Deep learning model
- > 30FPS
- Anti-vibration

ACCURATE

- Sub 1-mm accuracy

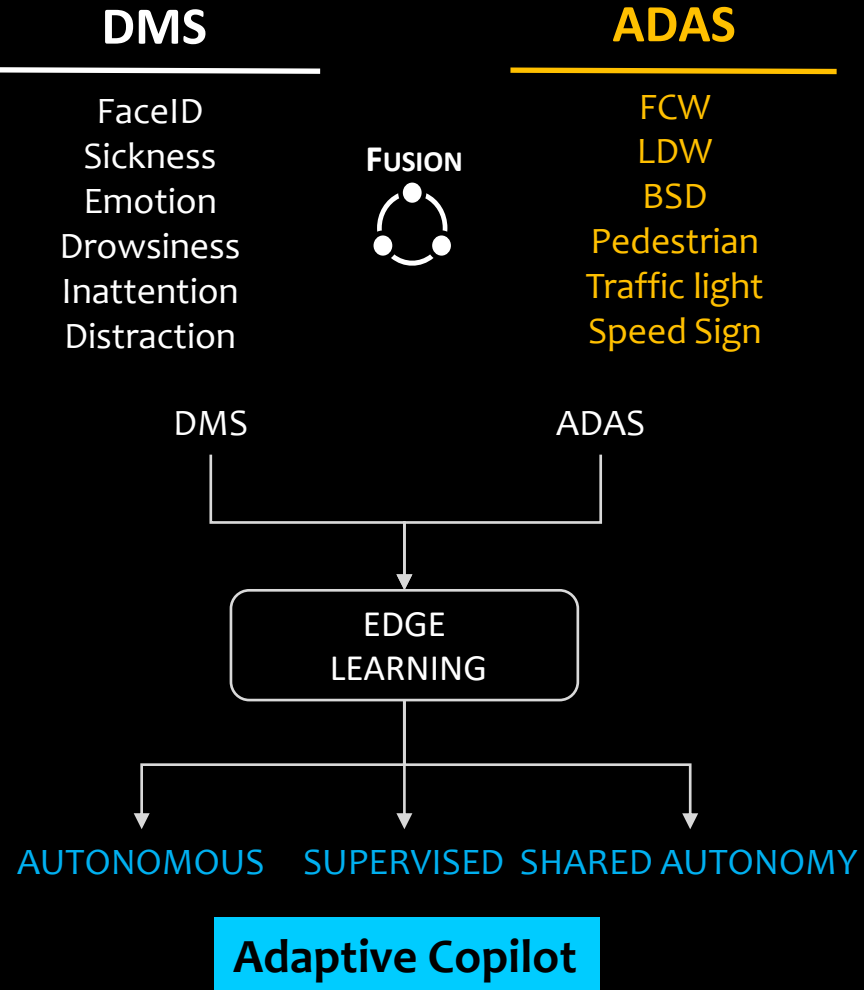


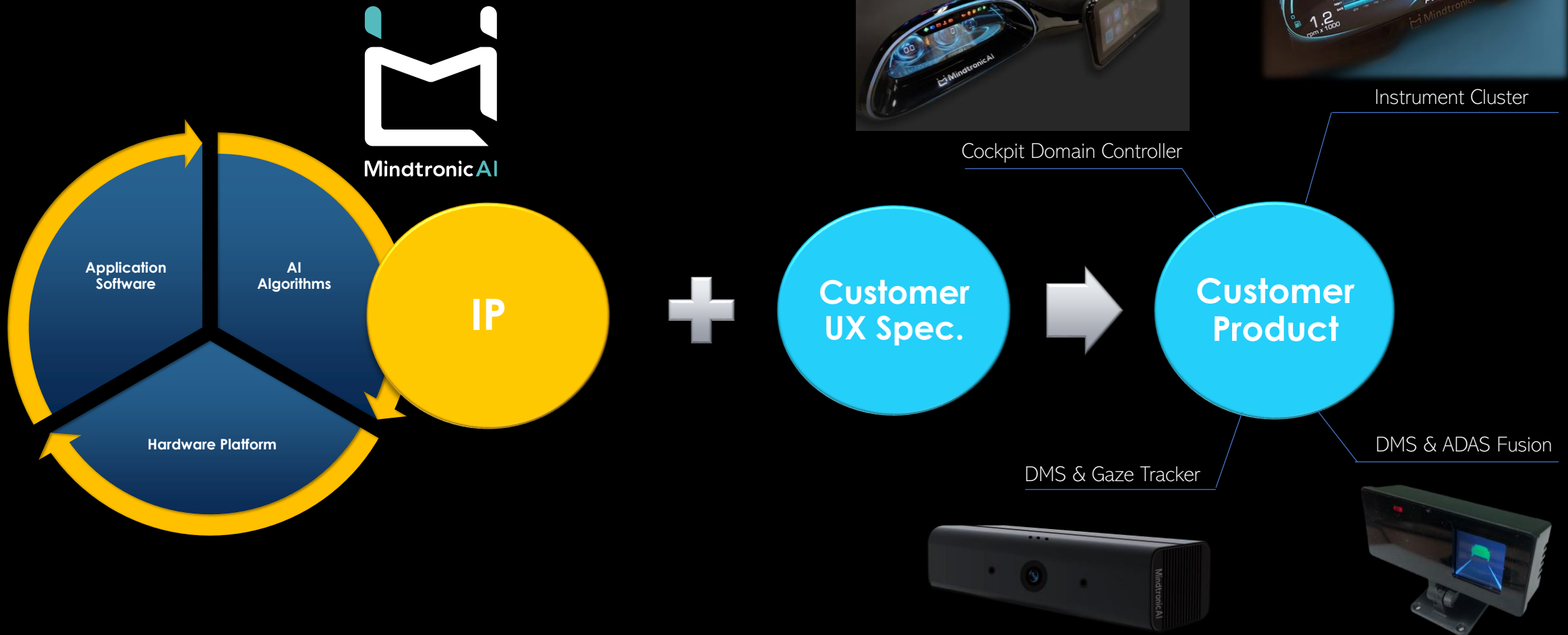


Mindtronic AI

DMS FUSION WITH ADAS

Edge Learning to Enable Adaptive Copilot







Mindtronic AI SDK is running in a range of SOC in customer's hardware & ECUs



QNX HYPERVERSOR

Mindtronic AI SDK is ported onto various of operating systems in customer projects

Lightweight, Real-Time, Scalable & Private