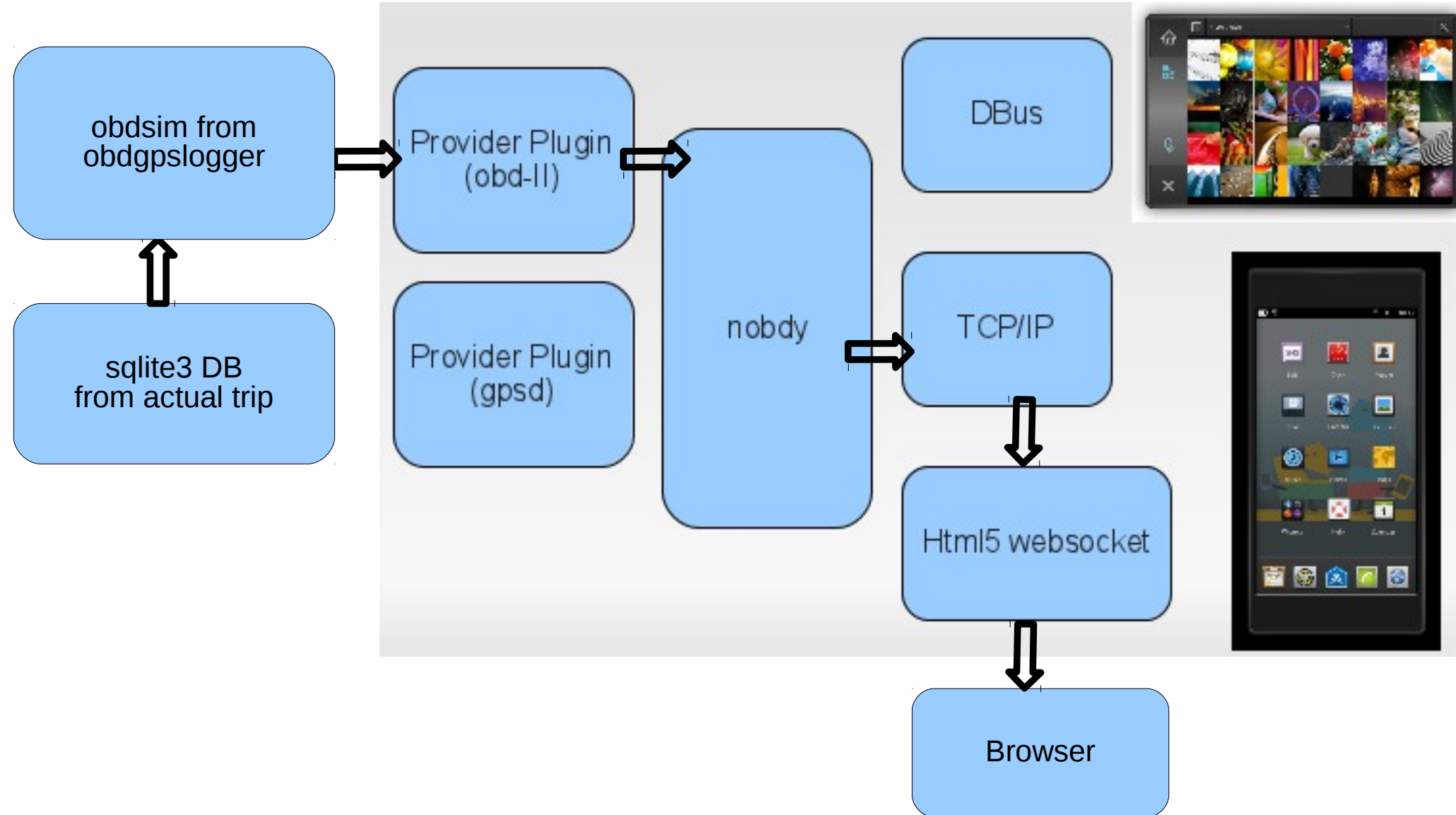# Automotive Open Source Middleware

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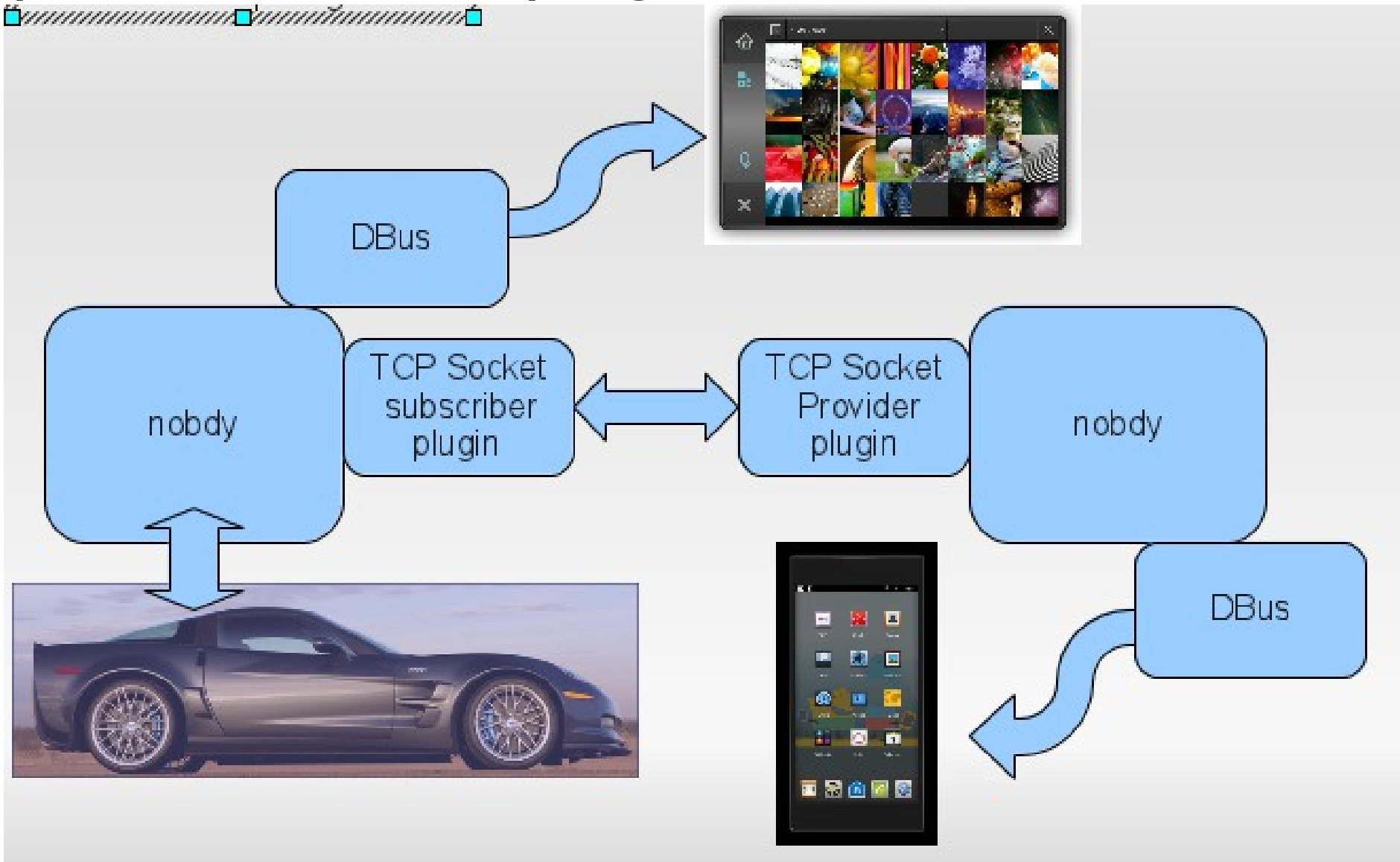for nOBDy, libOBD, OBDref and OBDGPSlogger teams (#linuxice on freenode)

Extensible plugin framework (nOBDy) + libraries (libOBD) + components (OBDGPSLogger) = rapid vehicle SW development

nOBDy = vehicle data abstraction service and multiplexing daemon

nOBDy is a plugin framework with language-agnostic API that includes GPS, D-Bus, tcp and bluetooth plugins and a websocket/HTML5 interface.

ExoPC Atom slate running Ubuntu IVI Remix and featuring the nOBDy websocket gauges software created by tripzero (Kevron Rees) and making use of OBDGPSlogger suite's obdsim created by Chunky (Gary Briggs) with data transport provided by libobd created by malcom2073 (Michael Carpenter).

The closer to metal, the more important source code and standards.

Manufacturer	Confirmed shipping system	Architecture
Fiat-Chrysler Blue&Me (500, Delta), Kia Uvo (Sorento)	Microsoft Windows Embedded Automotive	
Ford (all?)	MyTouch/Sync-Microsoft; OpenXC-Android	Cortex A8
General Motors/Cadillac User Experience	MontaVista Linux	ARM11 600 MHz
Geely (China); Hawtai (China)	Linux: Moblin (MeeGo-Tizen precursor)	Atom E6xx
Renault R-Link	Android	
Honda (Accord, Odyssey, Pilot), Audi (A8L, Q5, A6), BMW (7-series and M models), Chrysler, Daewoo, GM (OnStar), Hyundai, Land Rover, Porsche, Saab (9-3) Renault (SM7)	QNX	

Source: OEM or OS vendor website or press release, linuxdevices.com, iSuppli tear-down.

OBDII: in U.S. vehicles since 1996. Event Data Recorders: in 2015.

Use cases:

• Integrate mileage, speed, performance data with driver's life.
• Share via V2V and V2I *ad hoc* and mesh networking (802.11p, UMTS).
• Mine data to improve safety, reduce costs and save time.

nOBDy, libOBD and OBDGPSLogger are GPL'ed deb packages.

OBDref   libOBD   nOBDy   OBDGPSlogger   Ubuntu IVI Remix