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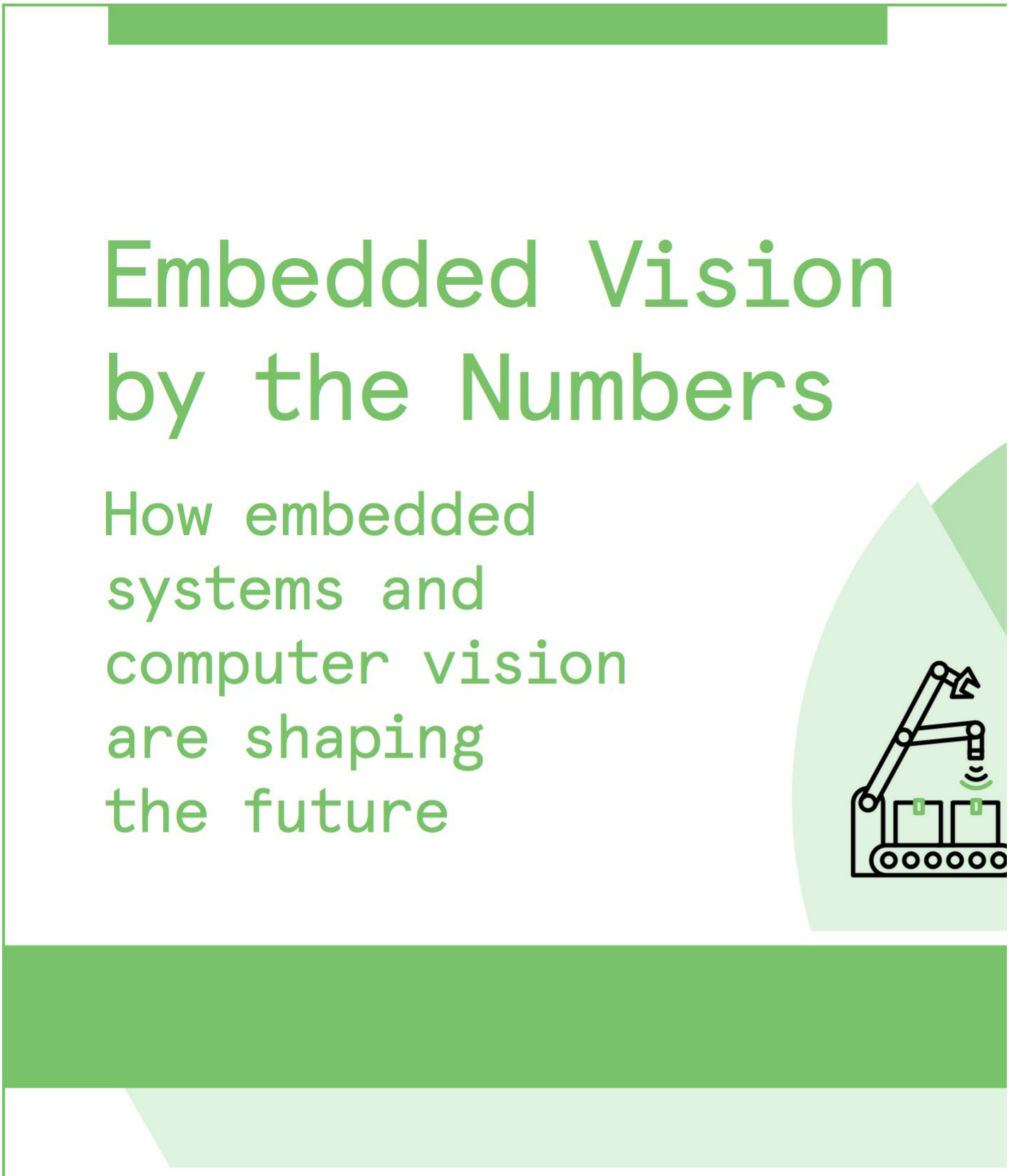
Avnet Sees Clear Future for Embedded Vision in Automotive

Terms:

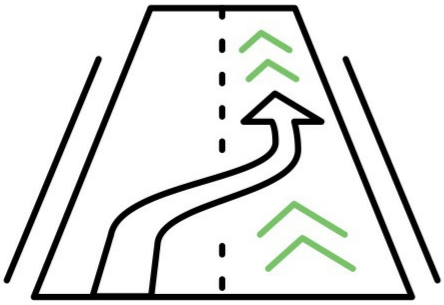
New infographic breaks down opportunity for ADAS and fully autonomous driving

Embedded vision technology can help machines "see" by quickly extracting intelligence from images in real time and under various lighting conditions. In the automotive space, this can enable autonomous cars to avoid that pedestrian in the crosswalk or roadside collision faster and more efficiently than ever before.

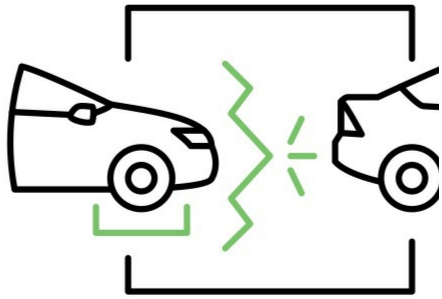


ADAS

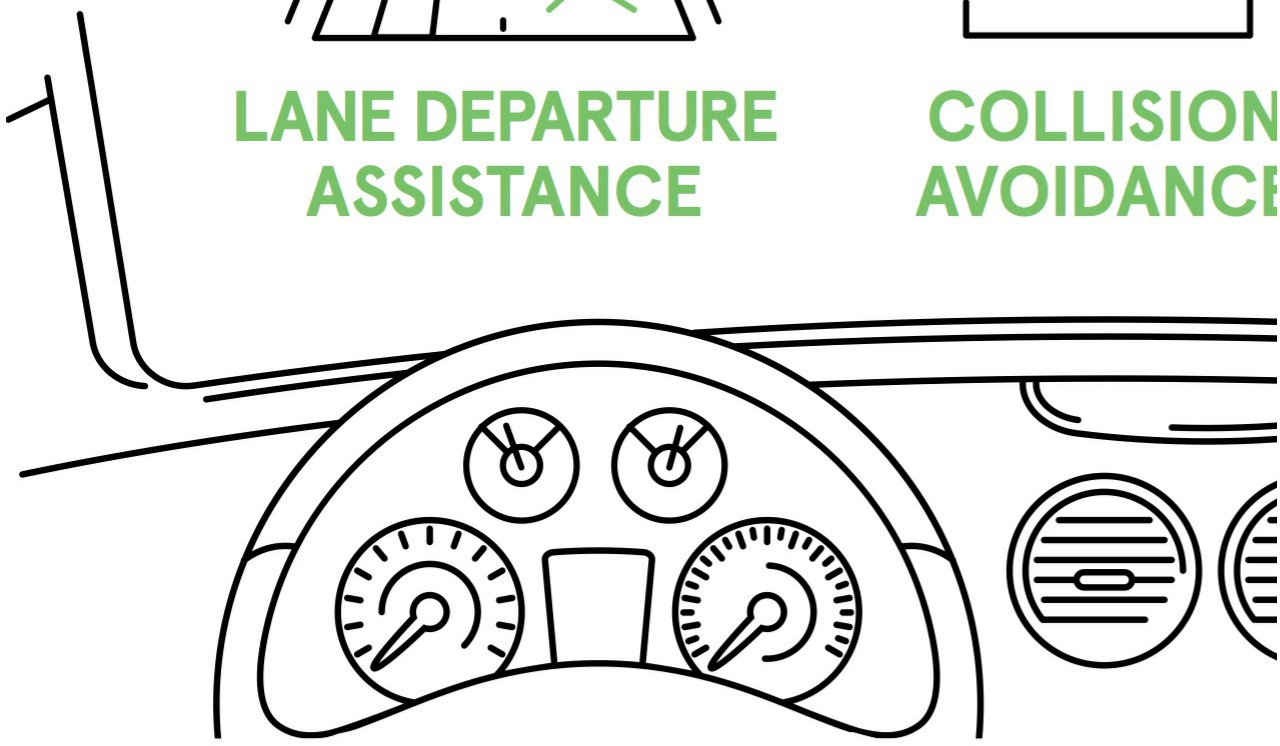
Advanced systems ar
of **embedd**
features lik



LANE DEPARTURE ASSISTANCE



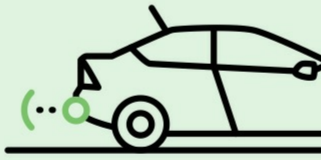
COLLISION AVOIDANCE



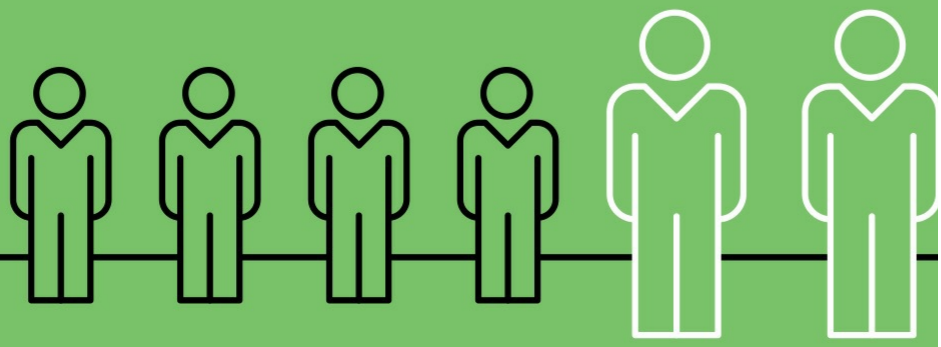
Autonomous driving
embedded vision

$4

market by 2021:



Source: Embedded Vision Alliance,
September 2017



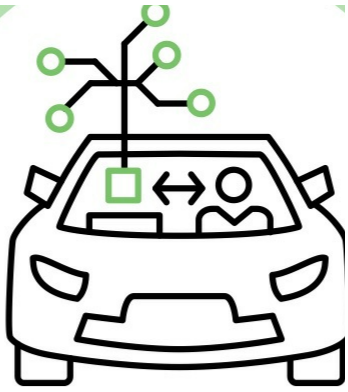
20

of consumers would p

$3,00

for autonomous drivin





MOBILE DEVICE-CONTROLLED INFOTAINMENT SYSTEMS

AI-BASED ASSISTANT IN-VEHICLE

Source: J.D. Power and Associates, March 2014 and April 2017

Setting the stage for **fully a**

LEVEL 0



DRIVER-ONLY ASSISTANCE (lane departure warn

LEVEL 1



ASSISTED DRIVING (adaptive cruise control or parki

ASSISTED DRIVING (adaptive cruise control or parki

TODAY'S TECHNOLOGY

LEVEL 2



PARTIAL AUTOMATION (highway driving or parking

LEVEL 3

CONDITIONAL AUTOMATION (highway and traffi

LEVEL 4

HIGH AUTOMATION (urban driving and valet driverle

LEVEL 5

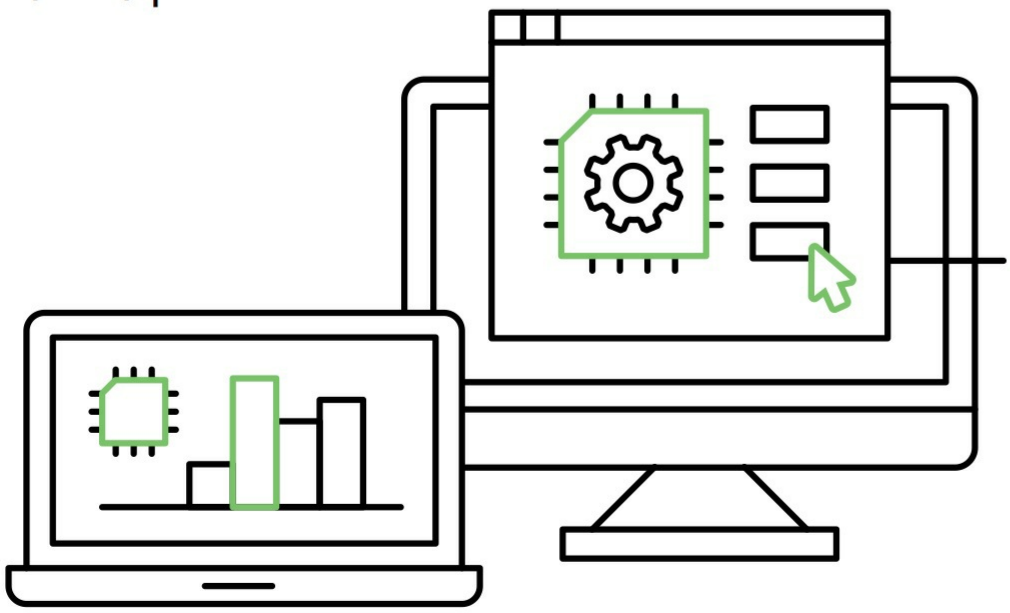
FULL AUTOMATION (combines all other autonomous

Source: Car & Driver, October 2017

All Programmable technologies bring clarity to the complexity of higher-level automation

SOFTWARE PROGRAMMABILITY

with system on a chip (SoC) processors

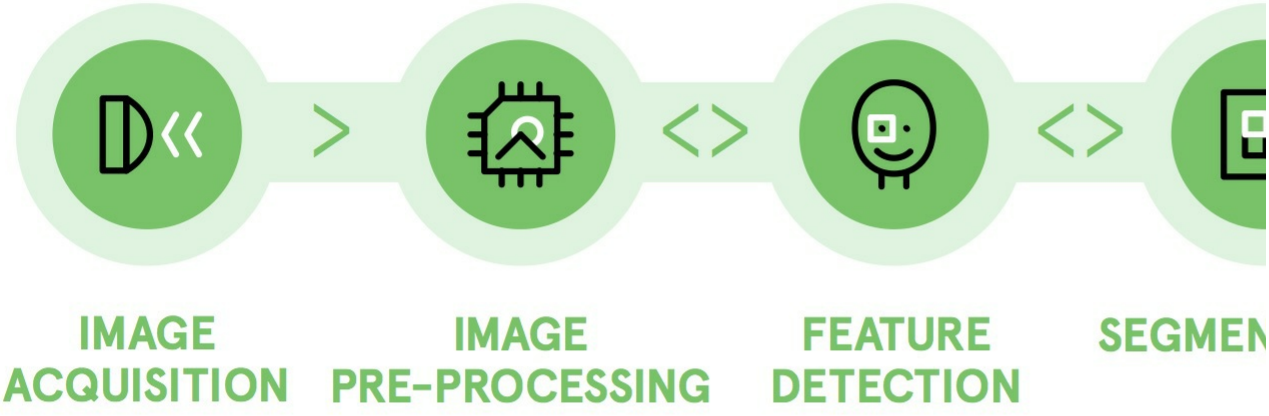


Source: Avnet, January 2018

How **embedded vision** happens

Before, externa
hardware interc
process of macl

Now, with all Pr
the complex pro
from a camera i
car is made sim



Source: Embedded Vision Alliance, December 2013

Learn how Avnet can help y

avnet.com/embeddedvisi

Sources:
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