



NAND Flash & Automotive Applications

Martin Booth

Director of Marketing, SanDisk Corporation

Presented at Flash Memory Summit, Santa Clara, August 2015

SanDisk®

Forward-Looking Statements

During our meeting today we may make forward-looking statements.

Any statement that refers to expectations or other characterizations of future events or circumstances is a forward-looking statement, including those relating to market position, market growth, future products, product roadmaps and expected timing of product capabilities, specifications and sales, industry trends, future memory technology, production capacity and technology transitions.

Actual results may differ materially from those expressed in the forward-looking statements due to factors detailed under the caption “Risk Factors” and elsewhere in documents SanDisk files from time-to-time with the SEC, including our annual and quarterly reports.

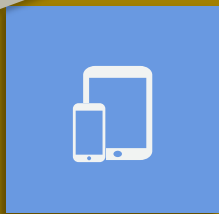
SanDisk undertakes no obligation to update these forward-looking statements, which speak only as of the date hereof.

50B Connected Devices by 2020

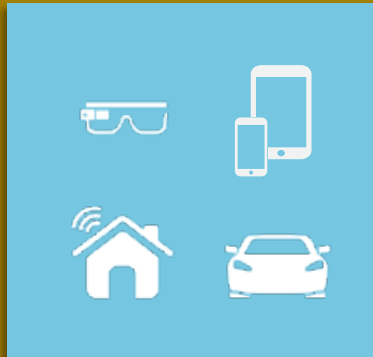
99% of “Things” Not Connected Today*

90% of Data Created in Last 2 Years*

Exponential Growth of Flash Applications



Mobile & Tablet



Connected Home & Automotive



Internet of Things

NAND Flash Enabling Next Gen Connected Cars

Infotainment Era 2012-2018



- ◆ Display Audio
- ◆ Simple Apps
- ◆ 2D/3D maps
- ◆ Light weight OS
- ◆ Storage: 4GB– 32GB
Cards & Embedded

Connected Cars 2015-2020



- ◆ 4G LTE Connection
- ◆ More Apps / 3D Maps
- ◆ CarPlay/ Android Auto
- ◆ Advanced OS/ Augmented Reality
- ◆ Natural Voice HMI
- ◆ Storage: 16GB – 128GB
Mainly Embedded

Self Driving Era 2018-2025



- ◆ Separate Computer for
Autonomous Drive
- ◆ HD Maps
- ◆ Cloud Cache of V-X data
- ◆ Storage: 128GB +

Storage Sub-system Design Considerations

- Challenges for automotive engineer include
 - Minimize system cost
 - Maximize reliability
 - Acceptable performance / responsiveness
- Most of this is “use case” dependent
 - Need to consider your use case
- Products from different vendors will perform differently based on use case
 - Speed, Reliability, Endurance



Thank You

Expanding The Possibilities of Storage

Visit us @ Booth #207

martin.booth@sandisk.com

SanDisk®