



Two New Mobile Device Form Factors

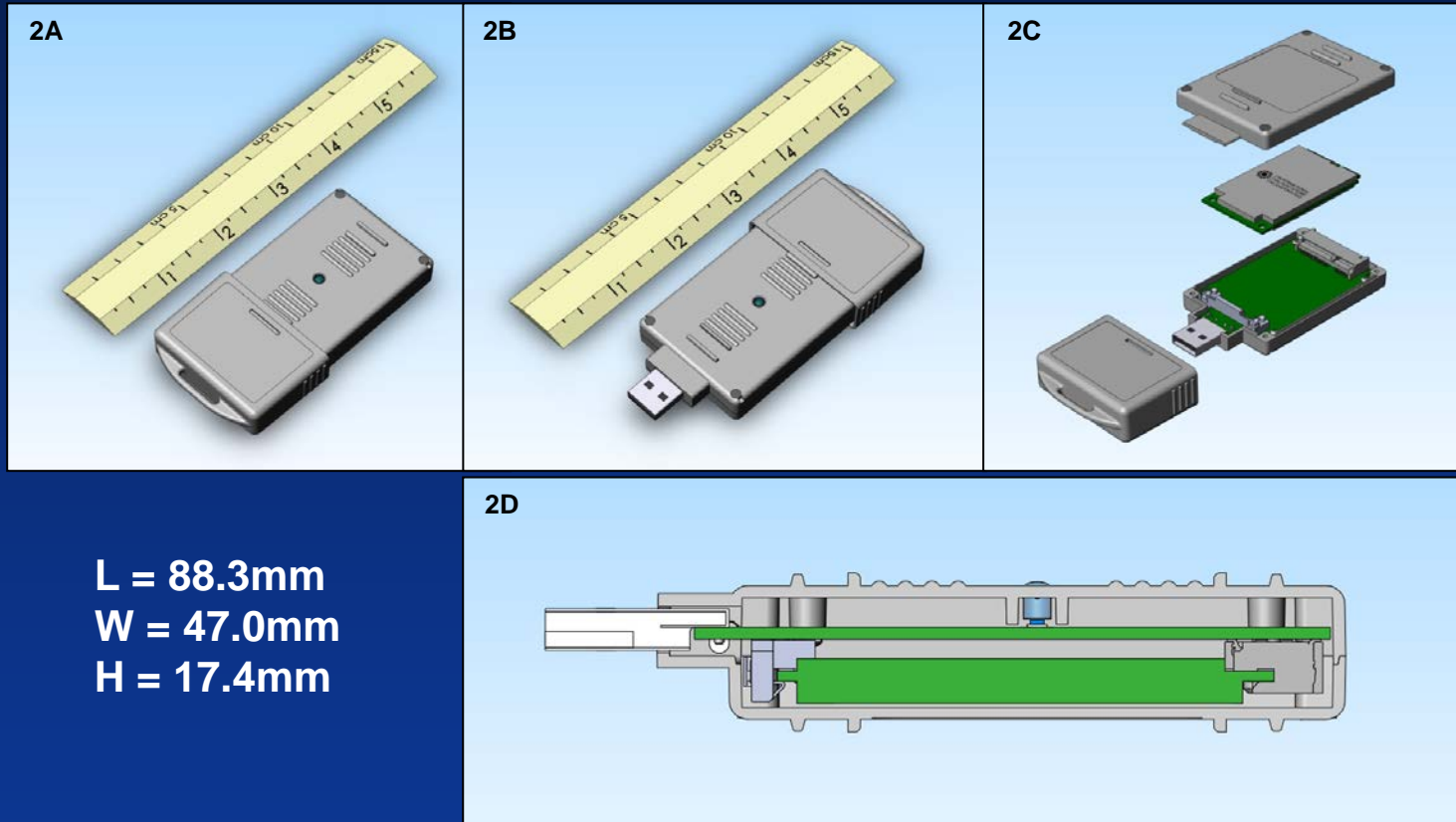
*****USB Storage*****

&

*****Pocket Size Motherboard*****

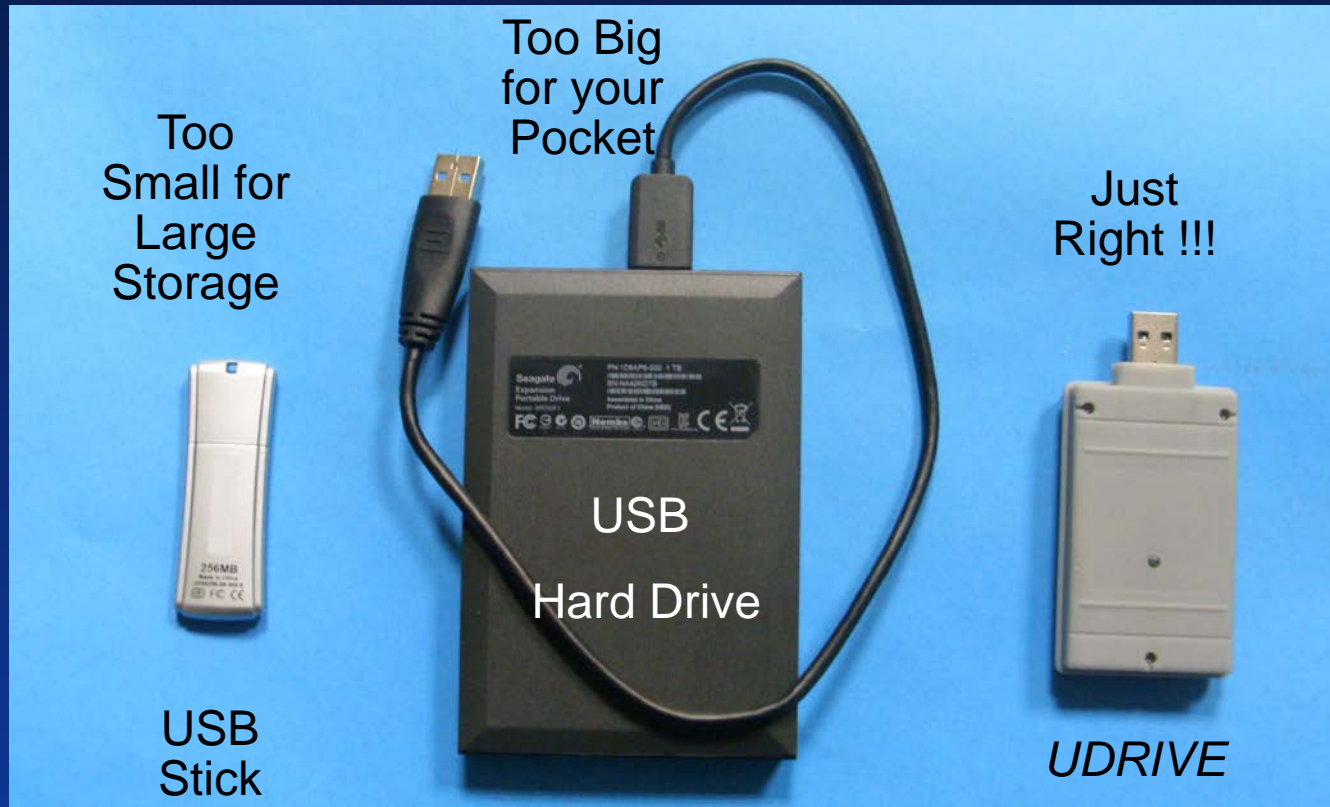
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USB Storage using MSATA Cards



For this Presentation, We will refer to this form Factor as a *UDRIVE*

Size Matters in Portable Storage



Portable Storage Use Comparison

<i>Market</i>	<i>USB Stick</i>	<i>UDRIVE</i>	<i>USB Hard Drive</i>
Promotional Handout	Best	Poor	Poor
Boot Code	Good	Good	Poor
Computer Backup	Poor	OK	Good
Windows To Go	Good	Good	Poor
High Speed/Large Capacity	Poor	Good	Good
Performance/Quality	Low	High	Good
Enterprise Mobile Storage	OK	Best	Fair

Poor	OK	Good	Best
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Summary: USB *UDRIVE*

- Pocket Size USB SSD with No Dongle Required
- Available MSATA Storage from 4GB to 1TB
- Ultra High Speed 3.0 (& 2.0) with UASP



Topic # 2: Pocket Computers

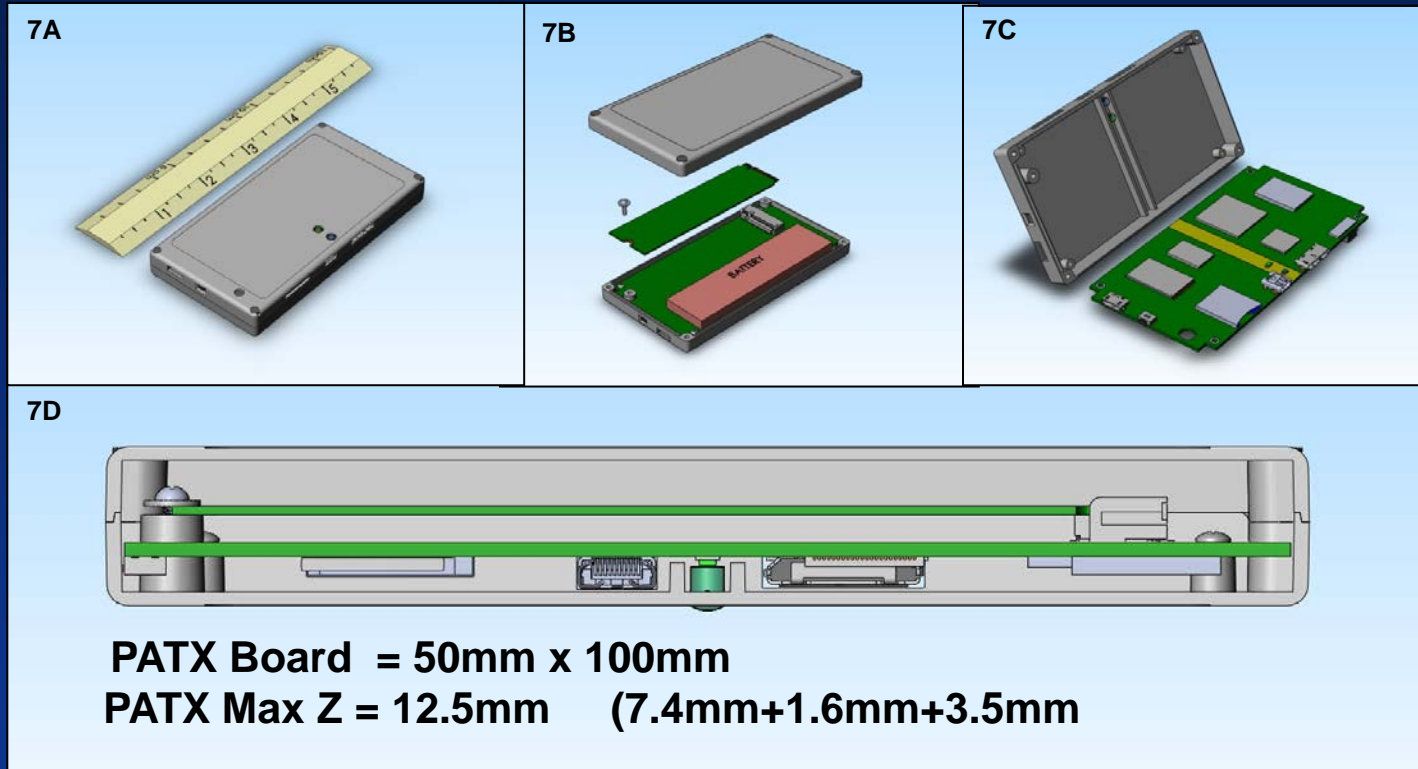
Are Smart Phones made by a Select Few To Be The Only Pocket Computers?

Maybe Not: A Pocket Motherboard Standard May be the Key Enabler to a Wide Variety of Pocket Computers...

We call our Pocket Motherboard PATX for “Pocket ATX”

- *Pocket Size : Fits easily in one hand*
- *Wireless*
- *Battery Power*
- *Hardware USB Connectivity*

PATX DEMONSTRATION PRODUCTS



Two Versions:

- 1) Marvell 370 ARM with PCIe USB 3.0 Bridge
- 2) Allwinner A20 ARM

PATX Definition is a Complex Exercise

The Basics

- ❑ X-Y Dimensions & Height Allowance
- ❑ Heat Dissipation
- ❑ CPU – Size, Socket Option, Ball Spacing
- ❑ Boot Method
- ❑ DRAM – Parallel/Serial, Module Type
- ❑ Power Specifications
- ❑ Human Interfaces–Video,Audio,Etc
- ❑ Wireless Support – WiFi, Bluetooth
- ❑ USB – 3X, Host/Device, OTG
- ❑ SD/uSD Support
- ❑ Internal I/O – PCIe, MIPI, I2C, SPI, etc
- ❑ Storage – SATA, USF, PCIe
- ❑ Pluggable Interfaces – M.2, PCIe,
- ❑ Front Panel Indicators & Connections

Guiding Principles

1. Wireless for Cloud & Operator
2. USB for Network and Hardware Connectivity
3. M.2 For Storage & Expandability
4. Innovation in Packaging



Summary Thoughts

We Discussed two new Mobile Device Form Factors

- Portable USB Storage Using High Capacity Flash Cards
- A Standard Motherboard Form Factor for Mobile Devices

We hope that this information will help you in your future innovation endeavors.



Thank you

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