Pushing the Boundaries of Mobile Interface Technology

Joel Huloux
Chairman,
Board of Directors
Legal Disclaimer

The material contained herein is not a license, either expressly or impliedly, to any IPR owned or controlled by any of the authors or developers of this material or MIPI. The material contained herein is provided on an “AS IS” basis and to the maximum extent permitted by applicable law, this material is provided AS IS AND WITH ALL FAULTS, and the authors and developers of this material and MIPI hereby disclaim all other warranties and conditions, either express, implied or statutory, including, but not limited to, any (if any) implied warranties, duties or conditions of merchantability, of fitness for a particular purpose, of accuracy or completeness of responses, of results, of workmanlike effort, of lack of viruses, and of lack of negligence. ALSO, THERE IS NO WARRANTY OR CONDITION OF TITLE, QUIET ENJOYMENT, QUIET POSSESSION, CORRESPONDENCE TO DESCRIPTION OR NON-INFRINGEMENT WITH REGARD TO THIS MATERIAL. All materials contained herein are protected by copyright laws, and may not be reproduced, republished, distributed, transmitted, displayed, broadcast or otherwise exploited in any manner without the express prior written permission of MIPI Alliance. MIPI, MIPI Alliance and the dotted rainbow arch and all related trademarks, tradenames, and other intellectual property are the exclusive property of MIPI Alliance and cannot be used without its express prior written permission. IN NO EVENT WILL ANY AUTHOR OR DEVELOPER OF THIS MATERIAL OR MIPI BE LIABLE TO ANY OTHER PARTY FOR THE COST OF PROCURING SUBSTITUTE GOODS OR SERVICES, LOST PROFITS, LOSS OF USE, LOSS OF DATA, OR ANY INCIDENTAL, CONSEQUENTIAL, DIRECT, INDIRECT, OR SPECIAL DAMAGES WHETHER UNDER CONTRACT, TORT, WARRANTY, OR OTHERWISE, ARISING IN ANY WAY OUT OF THIS OR ANY OTHER AGREEMENT RELATING TO THIS MATERIAL, WHETHER OR NOT SUCH PARTY HAD ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.
MIPI Alliance: What We Do

• Global, collaborative work

• Drive interface technology through specifications

• Focus on Mobile Terminal
MIPI Alliance: What We Have

• 30+ specifications released
• Widely adopted technology
• Member IP licensing rights
• Industry’s leaders and innovators
MIPI Alliance: Who We Are

• 200+ companies
• 5000+ members
• Span the mobile terminal ecosystem
• Bright, dedicated minds
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Founded by ARM, Nokia, ST and TI</td>
</tr>
<tr>
<td>2004</td>
<td>Intel, Motorola, Samsung and Philips join MIPI Board; Initial Working Groups and Investigation Groups formed</td>
</tr>
<tr>
<td>2006</td>
<td>Scope of specifications framed for Mobile Terminal</td>
</tr>
<tr>
<td>2007</td>
<td>First specs released focusing on display, camera, audio, physical layer and protocol stack</td>
</tr>
<tr>
<td>2008</td>
<td>Membership exceeds 150 companies</td>
</tr>
<tr>
<td>2009</td>
<td>Interop workshops held; new Working Groups formed; membership grows despite recession</td>
</tr>
<tr>
<td>2010</td>
<td>Numerous MIPI-based products released to market</td>
</tr>
</tbody>
</table>
Market Forces Create Demand for Faster Processing

- Total WW Smartphone data usage from 2009 to 2011 (estimated) is forecasted to increase 368% per year*
- New WLAN technologies need bandwidth > 1 Gbps
- 4G technology advancements continue
- Board-level real estate becoming more precious
- Power management increasingly more important
- New advanced (4G) radio architectures & new frequency bands

* In-Stat market data
MIPI Interfaces Meet Market Needs

- MIPI Alliance provides interfaces for peripherals as well as chip-to-chip communication

- Diagram is only a representation of a potential system architecture

- MIPI Alliance does not define or recommend a particular architecture
Partnerships Enhance Industry Specifications

• JEDEC released Universal Flash Storage UFS v1.0 specification, using MIPI’s M-PHY℠ and UniPro℠ specification

• MIPI Alliance and USB 3.0 Promoter Group announce collaboration to develop Super-Speed Interface Chip specification
Specs Move Into Next Phase of Deployment

• Numerous interoperability events
• Testing equipment/service providers build products & protocols
• OEMs release MIPI-based products
Continued Need for Speed

• March of mobile technology continues
• More consumer electronics go mobile
• Consumers want more data, and they want it faster
• MIPI Alliance will continue to speed up communications – inside the phone
THANK YOU