



Annual General Meeting 2009

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About MMA

- Non-Profit Corporation (Membership)
- Open to any commercial entity designing or manufacturing MIDI HW/SW
- Each member has one vote
- Technical Standards Board of Directors manages standard-setting process
 - Elected by Membership



About MMA - Origins

- Formed in 1985 by early adopters to continue the founders work
- Established formal process for deciding meaning of undefined MIDI messages, so manufacturers could develop products that worked with each other, and with those of other manufacturers, creating unique value for consumers



About MMA – History

- Periods of high and low activity for defining new messages for MI products
- Periods of high activity due to interest in MIDI from other markets (lighting control, computer audio, cell phone ring tones)
- Board members constantly alert for ways MMA can help companies create value for consumers through new standards



Example Standards

- MMC and MSC
- General MIDI
- DLS & I3D
- SP-MIDI and Mobile XMF/DLS
- iXMF (pending)
- HD Protocol (pending)...



Why HD Protocol?

- MMA response to developers who...
 - Don't want to use 1980s technology
 - Think 7 bits is not enough
 - Don't like putting 7 bit data into 32 bit words
 - Need standard messages not in MIDI 1.0
 - Want more Channels, Controllers, etc.
 - Want something easier to use than MIDI 1.0
 - Bi-directional, self-enumerating, fewer exceptions



Why HD Protocol?

- HD Protocol is for the developer who cannot use MIDI 1.0 Protocol but does not want to be stuck using a proprietary, non-standard solution
- We have an obligation to provide interface standards for performance control, and where MIDI 1.0 Protocol is insufficient, we should look at providing something more.



What is HD Protocol?

- Same functionality as MIDI 1.0 Protocol using 64/128 bit messages
 - More Channels, Channel Groups
 - More Controllers, Per-Note Controllers
 - Up to 32-bit Data Values
 - Unification of Multiple Messages
 - Absolute Pitch
 - Time Stamps



HD Protocol also...

- Has Space for New Events & Articulation Models
- Is Interoperable w/MIDI 1.0
- Supports Device Inquiry/Enumeration



“HD-MIDI”?

- Probably not... Because people may think any “new MIDI” will replace MIDI 1.0, and HD Protocol does not do that yet.
 - Cost is prohibitive for many MIDI Products
 - New benefits not needed in all products



Benefits of HD

- HW controllers match SW capability
- More Articulation and Expression
- Better Support for Non-Keyboard Instruments
- Better Support for Non-Western Music
- Easier Event Editing, Easier to Use/Learn
- More Standardization Means More Value for consumers



HD Road Map

- Protocol w/MIDI .0 Functions and Some Enhancements
 - w/Full Compatibility with MIDI 1.0 Products
 - w/Packet Definition for Ethernet/UDP
- HD File Format
- New Messages, Application Profiles, A/V Sync, and more...



MMA Activities Summary

- Adopted in 2008:
 - Nothing. We were too busy with HD to do anything else.
 - 3D-MIDI about to be approved.
- Under Discussion:
 - HD-Protocol
 - V-Link (probably voting)
 - More, but can't tell you



New MMA Initiative

- Marketing and Evangelizing MMA Specifications
 - HD Marketing & Business Strategies Committee
 - Naming, Logos, Marketing Rules, Messaging
 - V-Link Specification
 - To makers of Software/Hardware that do image presentation and manipulation products
 - More in the future, if we get support



Join MMA

- You get to hang out (electronically) with all these smart people sitting around you
- You get to design the future standards, and we need your input
- You get early access and early to market
- You enable us to keep supporting the market with new standards





Alternate Transports Workshop

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Today's Agenda

- Part 1: Information about new technology standards that could provide significant value to the MIDI and Audio products industry
- Part 2: Open discussion of potential new standards to drive demand for MIDI products



Part One

- Invited guests from IEEE present information about **Ethernet AVB** (Audio Video Bridging) technologies, and answer your questions.
 - Michael Johas Teener, Broadcom
 - Kevin Stanton, Intel
 - Matt Mora, Apple



Ethernet AVB Questions

- How is it different from other Ethernet audio solutions?
- How will it change the networked audio market?
- How far along is the technology, and how broadly is it expected to be supported?
- Can we do MIDI with it, too?



Part Two

- Open discussion of MIDI over Ethernet, MIDI over USB, Wireless MIDI, RTP-MIDI. What would you like to know? What would you like to have happen?

