

### MC1-UHD

- SD/HD/3G/UHD Master control Switcher
- Presmaster Protocol
- 2x External Keys
- 1x 2D DVE for Squeeze back
- EAS Insertion
- openGear Card
- Dashboard controlled

### MEDIA I/O

- Multi Channel playout
- Live ingest
- Scheduling

### AIR CLEANER 2

- Live Event Production Delay
- Video & Audio support
- HD/3G/UHD
- SDI or ST-2110
- Up to 2 user stations
- Physical Push button
- Dashboard Controlled

### XPRESSION TICK-IT

- Browser Based Access
- Traffic integration
- Advanced Scheduling
- Multi-Channel Scalability
- Manual or Automated control

### ULTRIX

- SD/HD/3G/UHD
- SDI / ST2110
- 16x16 - 160x160
- Software defined
- Ultriscope MultiViewer w/ Closed Captioning

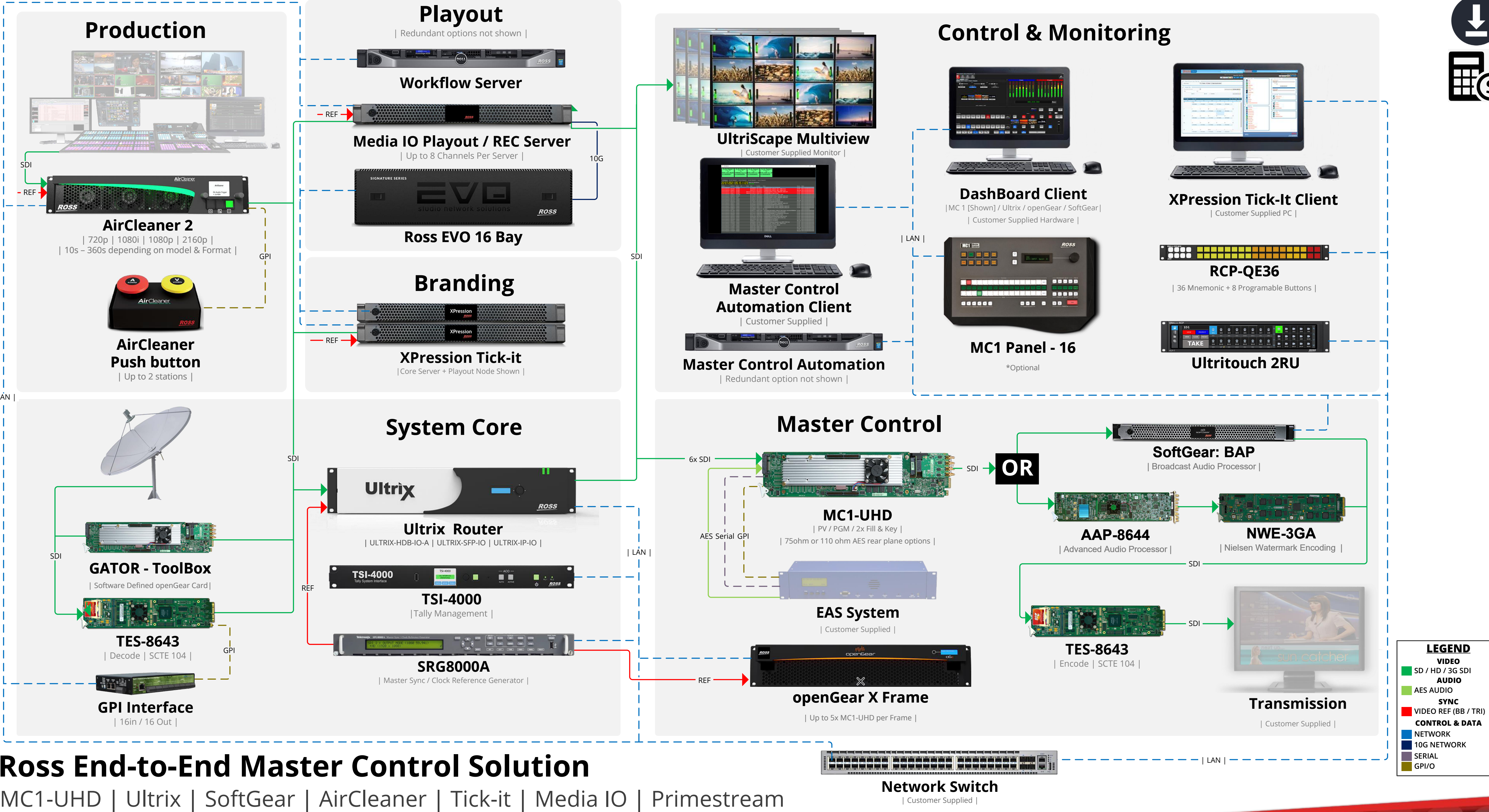
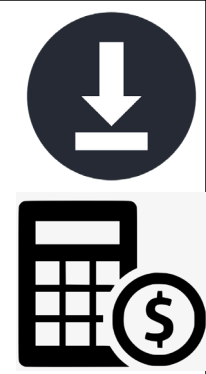
### OPENGear

- Loudness Processing
- Dolby Encoding
- Watermarking
- SCTE 104
- Format Conversion
- Distribution

### SOFTGEAR

- **Broadcast Audio Processor**
- Loudness Processing
- Dolby Encoding
- Watermarking



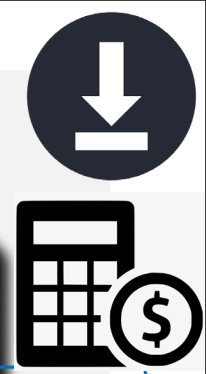


# Ross End-to-End Master Control Solution

MC1-UHD | Ultrix | SoftGear | AirCleaner | Tick-it | Media IO | Primestream







### Ingest, Playout & Branding



**Media IO Workflow Server**  
| Main & Back-Up | Up to 8 Channels |

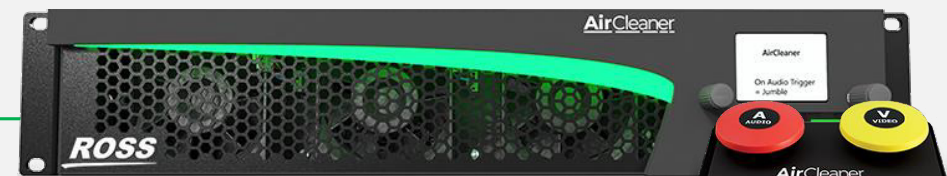


**Media IO Playout / REC Server**  
| Main & Back-Up | Up to 8 Channels |



**XPression Tick-it Solo**  
| Tick-it Branding Software & XPression BlueBox |  
| Single Channel show | \*Multi Channel options available

### Production & Live Feeds



**AirCleaner 2**  
| 720p | 1080i | 1080p | 2160p |  
| 10s - 360s depending on model & Format |



**Remote Feeds**  
| Customer Supplied |

### Control & Monitoring



**UltraScape Multiview**  
| Ultriscape-CA for Closed Caption support |  
| Customer Supplied Monitor |



**Master Control Automation Client**  
| Customer Supplied |  
| Serial or IP connection to MC1-UHD |



**Dashboard Client**  
| MC 1 [Shown] / Ultrix / openGear / SoftGear |  
| Customer Supplied Hardware |



**MC1 Panel - 16**  
\*Optional



**RCP-QE36**  
| 36 Mnemonic + 8 Programmable Buttons |

### Hardware



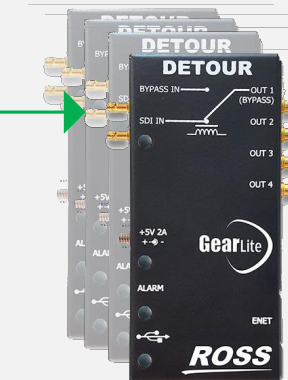
**SoftGear: BAP**  
| Broadcast Audio Processor |



**AAP-8644**  
| Advanced Audio Processor |



**NWE-3GA**  
| Nielsen Watermark Encoding |



**DETOUR**  
| 12G DA | Bypass Relay |



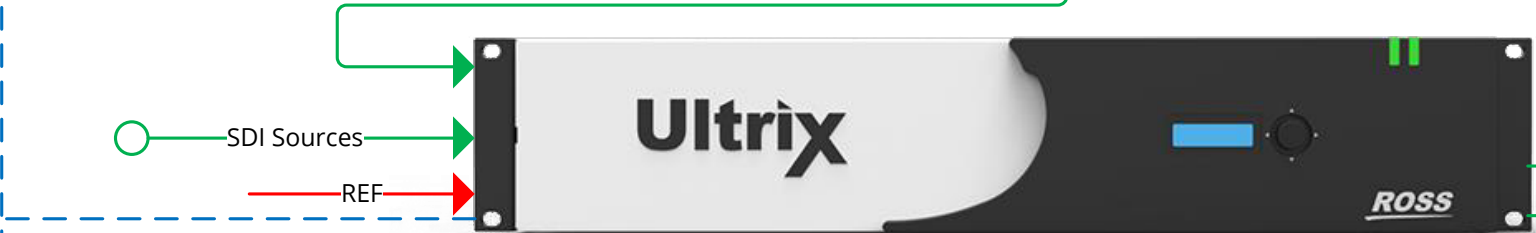
**Program out**  
| Customer Supplied Monitor |



**openGear X Frame**  
| 20 Slot Frame | Holds MC1-EAS-A & MC1-MK |



**Network Switch**  
| Customer Supplied |



**Ultrix FR2 72 x 72 Router**  
| UltraMix | UltraClean | UltraScape\* | UltraSync\* | UltraSpeed |  
| SFP-HDMI-x | SFP-MADI-xxx | SFP-FIBER-3G | SFP-x-12G | SFP-HDB-IO-3G |



**TSI-4000**  
| ACO option available |

### EAS



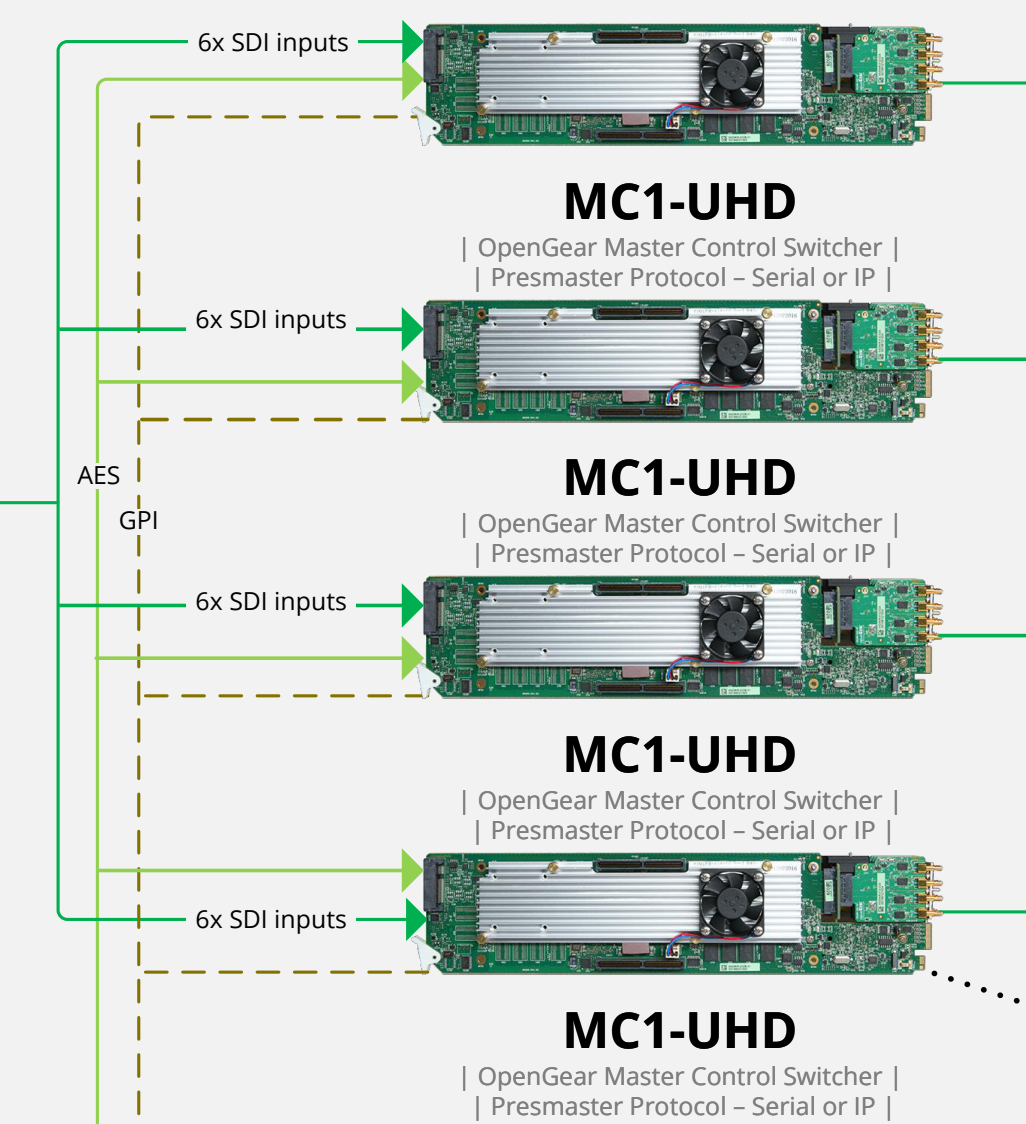
**MC1-PortEx**  
| 4x Serial to IP |



**EAS System**  
| Customer Supplied |



**AES-DA**  
| openGear Card |



**MC1-UHD**  
| OpenGear Master Control Switcher |  
| Presmaster Protocol - Serial or IP |

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**LEGEND**

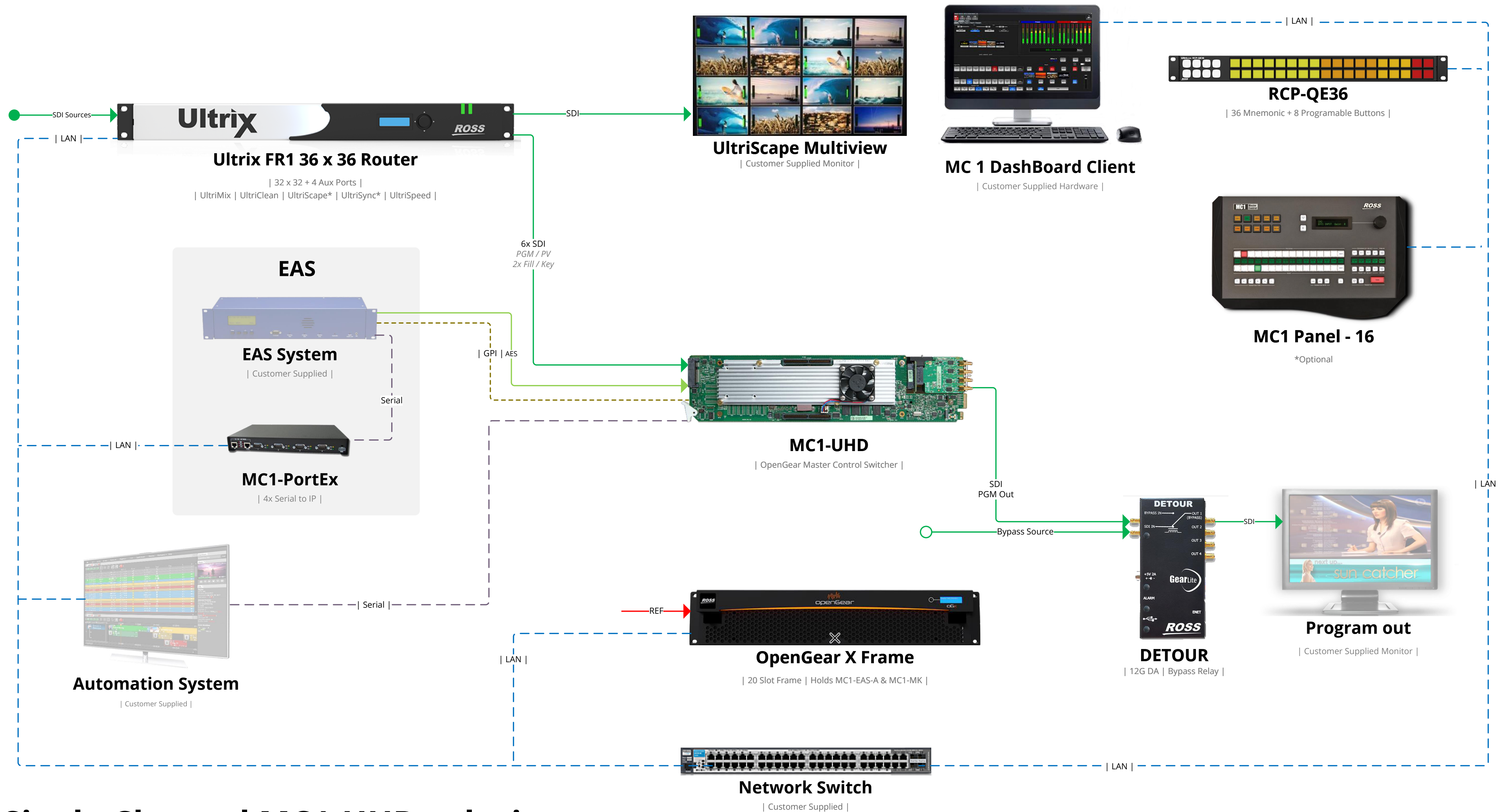
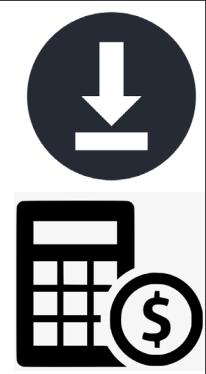
- VIDEO**  
SD / HD / 3G SDI
- AUDIO**  
AES AUDIO
- SYNC**  
VIDEO REF (BB / TRI)
- CONTROL & DATA**  
NETWORK  
SERIAL  
GPI/O

# Ross Multiple Channel Master Control Solution

| MC1 | XPression Tick-it | Ultrix | Media IO | openGear | SoftGear | Detour |







**LEGEND**

VIDEO	
Green	SD / HD / 3G SDI
AUDIO	
Light Green	AES AUDIO
Red	SYNC
Red	VIDEO REF (BB / TRI)
CONTROL & DATA	
Blue	NETWORK
Purple	SERIAL
Yellow	GPI/O

# Ross Single Channel MC1-UHD solution

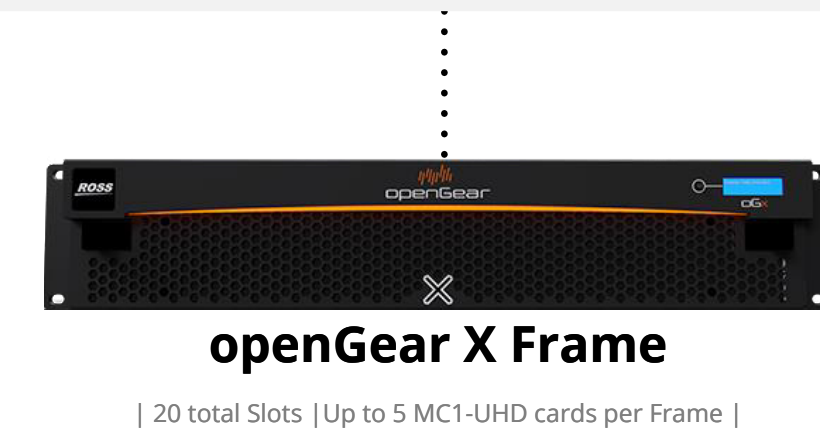
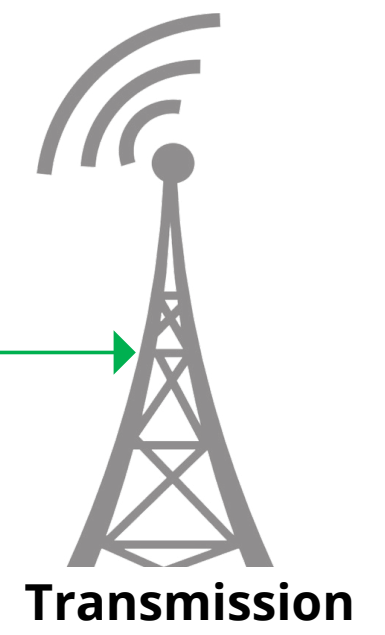
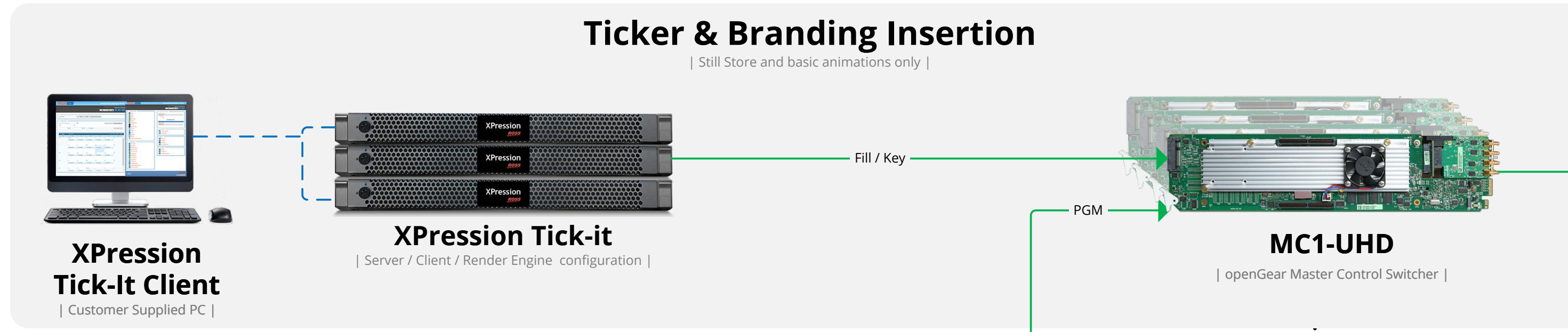
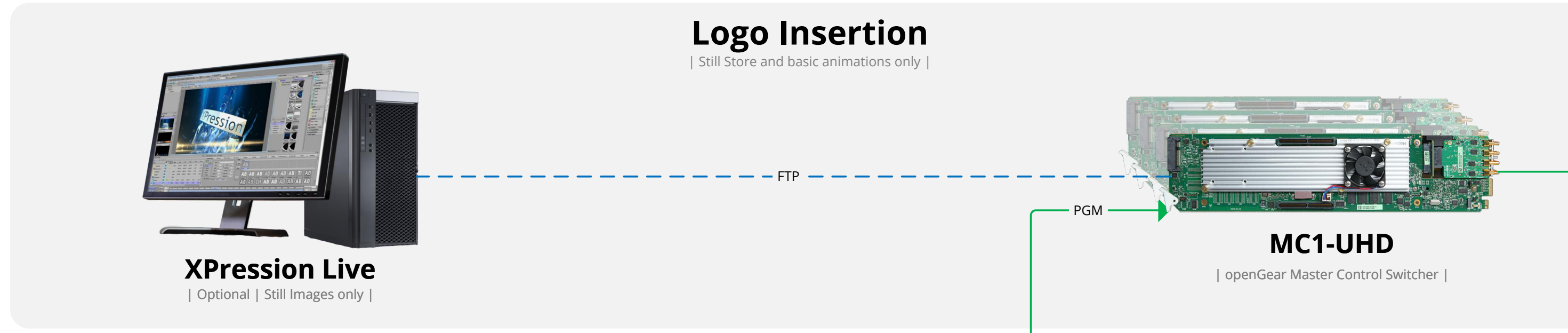
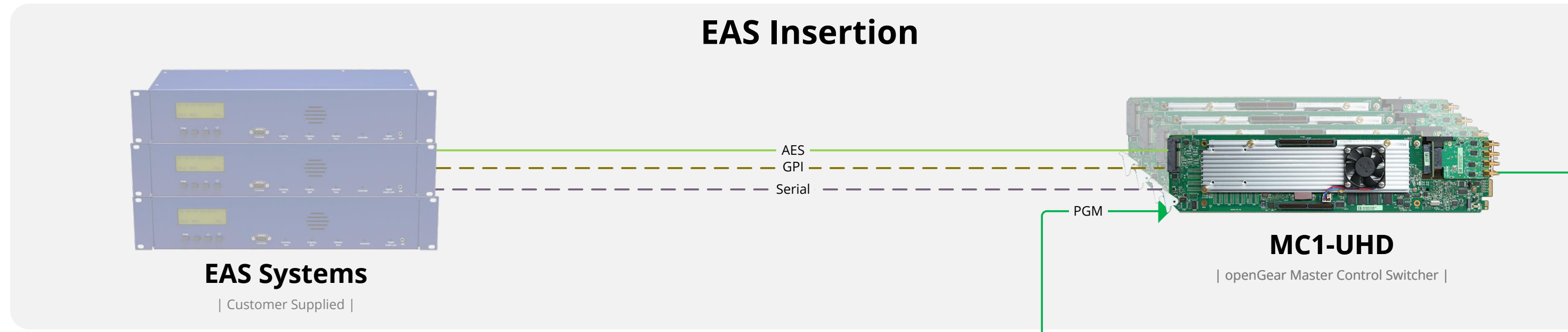
openGear | MC1-UHD | Ultrinsic







### Up Stream Program



LEGEND	
<b>VIDEO</b>	
<span style="color: green;">■</span>	SD / HD / 3G SDI
<b>AUDIO</b>	
<span style="color: lightgreen;">■</span>	AES AUDIO
<b>CONTROL &amp; DATA</b>	
<span style="color: blue;">■</span>	NETWORK
<span style="color: grey;">■</span>	SERIAL
<span style="color: brown;">■</span>	GPI/O

# Ross Downstream Master Control Solutions

## openGear | MC1-UHD

