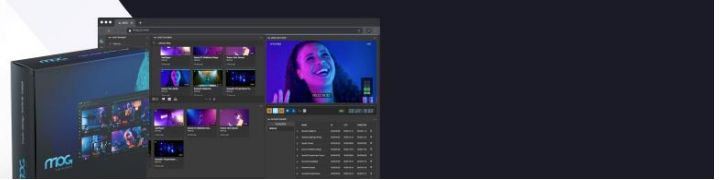


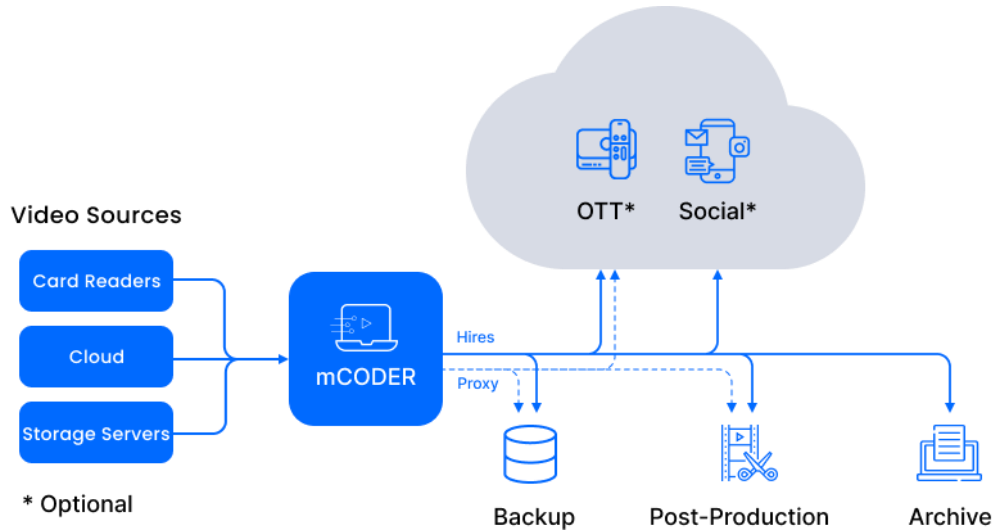
## mCODER Software



### Overview

mCODER is a professional multi-format and real-time transcoding system that can automatically transcode assets to internal house formats for a wide variety of media workflows.

It supports simultaneous media operations that can be a combination of transcoding and previewing files.



### Highlights

- Operation modes: manual, scheduled, and automatic
- Ingest and/or transcode the contents according to the destination format
- Supports spanned clips (Sony XDCAM EX, Panasonic P2, Panasonic GH5, GoPro and Canon)
- Optional remote preview for media selection, sub-clipping, and merge
- Burnt-in options: text, timecode, overlays (images and videos), and LUT
- Flexible file renaming engine
- Enable edit while ingest
- Metadata preservation and enhancement
- Multiple simultaneous transcodes
- Full featured local and remote user interface
- Proxy generation
- Artificial intelligence

### Specially Designed For

- Educational/Government
- Live Entertainment/Worship
- Corporate
- Sports
- Film/TV Studio/Scripted
- Digital News
- Post-Production
- Television/Broadcasting

## Features

Features
<b>Operation modes</b>
Automatic
Manual
Scheduled
<b>Clipnaming</b>
Flexible file renaming engine
Create diversified clipnaming templates
Clipnaming based on Metadata Profiles
Use of common labels (Id, label, Counter, Date, Original Source Name, Weekday, User)
Field numeric representation of the day of the week
Folder Structure creation
Drag and Drop support
"CreationDate" field can refer to a desired Time Zone
Add the label "_p" to proxy clips' names
<b>Multi-Configuration metadata management and enrichment</b>
An efficient internal asset management
Quickly search for assets metadata
Directly manage your assets metadata
Prevent the overwrite of metadata fields
Protect metadata fields
Delete custom metadata
Edit a file's source metadata based on a configured metadata profile
"Description" field editable in metadata widget
Set "Description" field as a column in the Asset Explorer list view
Favorite metadata fields
Create custom metadata fields
Add a "Rating" metadata field
Update the source metadata directly through the metadata widget
Add asset tags insertion in preset list
Re-use lists of possible values
Update Metadata in Media Central/Interplay using AMT-3 library
Take field (counter)
Support for "Reel" metadata field using Apple ProRes Wrapper
Read metadata from pre-configured cloud storages (Amazon S3 / Google Cloud Storage / Tencent / IBM Cloud Object Storage)
Preserve specific Arri fields
Preserve RED digital cinema color information
<b>Find immediately and learn everything about any asset</b>
Show or hide proxies on Asset Browser
Sort, order and search for files on Asset Browser
Asset Explorer - Resizable thumbnails
Asset Explorer - Support asset availability
Search for all assets on Asset Explorer
Extract thumbnails and posters while indexing on Asset Explorer
Asset Explorer - Playable thumbnails
Preview media with interactive Pop-up Players
Asset Explorer - View the exact duration of files with more than 24 hours
Asset Selection -View the total duration of the selected assets
Configure the asset's preview duration
Asset Selection - Add Numeric Input
<b>Asset management Check-in</b>
AVID AAF
AVID interplay
XML support
XSLT transformation - XML sidecar
Edit share flow
Vizzi OTT check in
Support for update on Vizzi OTT check-in
<b>Audio support</b>
PCM input and output support
Dolby E-AC-3, Dolby TrueHD, and DTS input support

## Features

- Dolby-E Input and output support
- DTS Coherent Acoustics (DCA)
- PCM 96KHz support
- Independent audio encoder for hires and proxy
- Individually map your audio by output target
- Playout audio only streams
- Loudness normalization (EBU R128)
- Audio downmixing & upmixing
- External audio files support (.WAV)
- MPEG-4 Audio (M4A) audio format as output
- Ability to mute proxy on the output

### Close captions

- CEA/EIA - 608
- Scenarist (SCC)
- Add sidecar - SubRip (SRT)
- Add sidecar - Fragmented WebVTT
- Add sidecar - ISMT/CMFT subtitles
- DCP subtitle burn-in (.SCC)
- Digital Cinema Package (DCP) open captioning
- Support captioning for OTT (CMFT, SubRip, and WebVTT)
- Stream with Closed Captions

### Locators

- Edit and delete locators
- Merge locators
- Preserve Metadata Enhancement locators created by an Automatic Job

### Scheduler (Calendar View)

- Scheduled Automatic Jobs via Scheduler
- Edit individual events
- Allow editing of settings for each occurrence/repetition
- Set the number of an event's repetitions
- Ability to Ignore files before a start date
- Placeholder when editing an occurrence name
- Use pre-set naming templates
- Define events to be triggered on any day, on working days only or only on weekends
- Set the Calendar Notion option to automatically adjust to daylight time
- Visualize scheduled events in a List View
- Export activity events

### Checksum media

- MD5 hash file
- MDL - Media hash list

### File ingest

- Execute multiple simultaneous transcodes
- Batch ingest
- Card ingest
- Clip merge
- Clip renaming
- Disable Clip File Naming generation
- Ingest while growing
- Growing file support for Grass valley Edius Workgroup v.9 and X
- Partially restore clips
- Rough cut
- Establish priority levels
- Insert Subclips SOM and EOM without colons
- Automatic drag and drop ingest
- Drag and drop media from several social networks
- Generate XML sidecar with WAV file as output while ingest
- Generate a .xml file for each output AVID clip or AVID sequence
- Merge as Sequence from MP4 proxy files
- Merge as sequence by sequence XML for MP4
- Automatically select workflows available in job control attending the source files
- Directly select the storage on the dashboard instead of accessing workflow profiles
- Copy assets

### Features

Group resulting assets into a single one
Copy - Transfer sidecars if available
Encode the contents according to the destination format
Decode the contents according to the destination format
Move assets
Edit while transcoding/ingesting
Place locators on growing files
Multiple resolutions check-in
Frame rate conversion
Variable Frame Rate Input
High Dynamic Range (HDR) support - HLG (arib std-b67) / PQ (SMPTE 2084)
High Frame Rate (HFR) up to 120fps (ST2081-10, ST2081-11, ST2082-10, ST2082-11 and ST2082-30)
Ability to perform "Run after completion" scripts
Audio only OPAtom as output
Opt to not overwrite files
Support for .MOV files containing "Run-length encoding" video essence
Enable "growing" support on EDL ingest workflow
Timecode SUM of selected cuts
Merge assets as EDL, regardless of the input's format
Merge Trimmed files
Merge files with different framerates
Merge P2 with different audio channels
Merge operations for Devices sources
Allow the merge of more than 200 assets
Support for spanned Panasonic P2 structure
Preserve original time code breaks in Panasonic P2 Format
Mute proxy option in output (requires proxy option)
Create Edit Decision Lists with cut points
View the total duration of the sub-clips in an EDL widget
Ingest from cloud locations
Digital Cinema Package (DCP) support
Choose to force fragment MP4 clips while uploading to a S3 bucket
Generation of MP4 files as fragmented MP4 with DCP packager
Digital Picture Exchange (DPX) support
Select IMF (Netflix Compliant) as the output metadata
FTP for generic network devices as input
Ability to delete OPAtom source files after ingest
Support for GOPRO spanned files
Support video with vertical rotation
MOG file package support
Support MOG Package from Cloud Storages
Outgest growing media directly from Interplay
Dual check in to interplay in a merge as sequence operation with the same MOBID for the sequences
HDR (PQ, HLG) conversion to SDR as output
Ingest image files
Support 48fps drop frame media (DJI Camera Drones)
Support for spanned clips
XDCAM support for spanned & merge clips in network locations/network devices
Add black bars to match the aspect ratio
Delete an Output via Job Abort
Schedule an Ingest operation through the Calendar via Automatic Jobs
Ingest and/or transcode the contents according to the destination format
Vubiquity assets support
Support for Vizzi collections as input files
Browse Avid Interplay folder structure from within the "Workflow selection window"
Avid Sub Clip export referencing Growing Master Clip
Generate Avid OPAtom assets to an FTP server
Independent targets and multiple outputs
Manage via web interface or REST APIs for integration with automation system
Update Metadata in Media Central/Interplay using AMT-3 library
Create Live Ingest Operations
Live Sources made available in the Asset Browser/Explorer widgets

## Features

- Override start timecode
- Index clips with same name but with different metadata

### Burn-In Video options

- Graphic burn-in while ingesting
- Text (Position, Text color, Box Color, Font Size)
- Timecode (Position, Text color, Box Color, Font Size)
- Overlays support (images and videos positioning)
- LUT (Look-Up Table) - Save particular color grades as a template

### Quality control - Report

#### Video Report

- Black frames detection
- Video freeze detection
- Scene change detection

#### Audio Report

- Audio clipping detection
- Loudness detection
- Silence detection

#### Others

- Timecode gap detection

### Automated ingest

- Dynamic workflows using metadata fields
- Dynamic workflows with support for metadata without sidecars
- Delete Assets in Dynamic Jobs
- Support different input types on dynamic configurations
- Ignore files before a start date
- Re-process assets with the same name
- Support metadata enhancement workflows
- Vizzi Collections support

### File playback

- Preview Editing Decision Lists
- Preview Clip Lists
- Read Metadata Timecode Package (Auto / Material Package / Source Package)

### Input/output social media \*Optional

- Google Chrome Social-m Plugin
- Social-m - Add support for live stream capture
- Metadata in Chrome Social-m Plugin
- Capture to Facebook Live
- Stream to Facebook Live
- Stream to Twitch Live
- Capture to YouTube Live
- File based YouTube Upload
- Capture X (Twitter) Live
- Stream to X (Twitter) Live
- Upload to Vimeo
- Metadata social annotation and enhancement

### Metadata Enhancement and preservation

#### Artificial Intelligence

##### Audio

- Audio clipping detection
- Loudness detection
- Silence detection
- Voice activity detection
- Audio mute detection
- Audio phase detection
- Mono audio detection

##### Video

- Black frames detection
- Video freeze detection
- Scene change detection
- Black Margins detection
- Flashing video detection

##### Object

**Features**

Concept tagger 2.0

Vehicle detection

License plate detection

**Others**

Timecode gap detection

Update existing interplay entry with new metadata

Possibility to add bounding boxes to player

**Transform**

Automatically Blur License Plates

Black margins automatic crop

Remove audio clicks

Remove audio clipping

AI Upscale

Reduce video flashing

**Additional AI Operations**

Face recognition 2.0

Face recognition - Support dataset with multiple images for each person

Age prediction detection

Object detection 2.0

Optical Character Recognition (OCR)

Speech recognition 2.0 (with ability to detect non speech tokens)

**Analytics**

Integrate with Google Analytics and Tag Manager

Enable or disable Analytics

Keep track of menu events

Receive video metrics

Keep track of Job Control widget's events

Keep track of Asset Explorer widget's events

**Improved security**

Support for Windows UAC

Support for HTTP/HTTPS Ingress

HTTPS (Hypertext Transfer Protocol Secure) for REST API

Secure login

User Impersonation

Token based authentication

Two-factor authentication

Remote services, system restart, and settings recovery features

DASH/HLS packager with DRM

Opt to "Keep me signed in"

Send a User Verification through email

Configurable password visibility in logs

**Transfer acceleration protocols**

Aspera FASP transport technology - Transfer acceleration protocol

FileCatalyst direct - Transfer acceleration protocol

**General Purpose IN/OUT**

GPI triggers supported

GPO triggers supported

**Additional Highlights**

REST API - allows interaction with RESTful web services

Change Aspect Ratio (4:3 / 16:9 / 1.9:1 / 2:1 or use same as source)

Active Format Description (Option to Preserve, Discard or Override)

Notify user upon connection lost with the Server

Manage via web interface or REST APIs for integration with automation system

Configurable quality and target latency of the preview stream

Logging - Human readable information on Services logs

Logging - Add user information on flow actions

Logging - Structured Logging

Receive SMTP notifications via e-mail

Support an external Database

Microsoft Edge / Firefox / Safari and Chrome Support

**Unified Interface User Experience**

Configurable web interface access port

### Features

- Embeddable Dashboards/Widgets
- Web-Based Interface with video preview
- Dashboards based experience where users can create their own personalized view
- Dashboards presets for ease-of-use deployment
- Create your own custom dashboard templates
- Import and Export Users' Dashboards
- Associate a single dashboard to multiple users
- LDAP user authentication
- User profile management
- Users permissions control
- Widget based modular interface
- Lock/Unlock widgets permission
- High contrast theme
- Choose between multiple interface themes (Midnight, Carbon, Dark or High contrast theme)
- Touch screen mode
- Monitoring - Advanced metrics
- Multi Language Support
- User tour
- Show/Hide player overlays
- Notifications of required actions needed to resume a workflow
- Monitor Grouped Servers' activity in a Group Activity Widget

### Multiviewer

- Define the quality and target latency of the preview stream

### Maintenance

#### Scheduler

- Reboot host or group
- Export database (backup) as a scheduled task
- Export logs as a scheduled task

#### Activity

- Export last activity
- Export all activity
- Export activity from a date range
- Clear all activity

#### Logs

- Export logs

#### Backup

- Export full backup - A full backup will create an archive of all the files and configurations
- Import full backup

#### Dashboards

- Export dashboards from one user or all users
- Import dashboards

#### Data

- Clean data usage
- Clean assets, flows and notifications
- Perform a Factory Data Reset
- Erase all data and reset the system
- Force clear cache

## Technical Specifications

### Supported File Inputs

#### Inputs

- | Category | Inputs   |
|----------|--|
| OnPrem   | ARRI ALEXA Cameras                                   |
|          | BlackMagic Cameras                                   |
|          | RED Digital Cinema                                   |
|          | Avid Files   |
|          | Avid Media Files (standalone or Nexis/ISIS)          |
|          | Avid Sequences (master clips and rendered sequences) |
|          | CANON DSLR 5D, 7D, C300, C100                        |
|          | Generic File Shares                                  |
|          | GoPro Cards  |
|          | IKEGAMI GFPAK  |

**Inputs**

<b>OnPrem</b>	JVC (AVC HD models)
	NextoDI NSB-25
	Panasonic CX350 HEVC
	Panasonic AU-EVA1 and GH5 Cameras
	<b>Panasonic P2</b>
	AJ PCD 2 / AJ PCD 20/30/35 / AJ MPD1
	AU-XPDI1E / AU-XPDI3EJ
	Multi Clip/Spanned XDCAM/XAVC/XDCAM-EX Structure
	<b>XDCAM EX</b>
	Sony SxS (SBAC-UT100, SBAC-US10/20/30)
	Sony XQD (MRW E-80, MRW E-90)
	<b>XDCAM HD</b>
	Sony XDCAM HD: Disc (PDW-U1, PDW-U2, PDW-U4)
	XAVC Structures
	DJI (Camera Drones)
	HLS Structures
	MPEG-TS Structures
	MOG Package
	<b>Network</b>
	XDCAM Network
	P2 Network
	ARRI RAW Network
	Ikegami Network
	<b>Storage</b>
	Avid ISIS / Nexis
	Avid Unity™ MediaNetwork
	DDP – Dynamic Drive Pool
	Facilis TerraBlock
	Harmonic MediaGrid
	Editshare EFS
NAS / SAS (SMB 2.0 and 3.0)	
Quantum StorNext	
ScaleLogic NX2 & ZX NAS Storage	
EMC Isilon	
QNAP	
Studio Network Solutions EVO	
Oracle Storage	
Netapp	
<b>Cloud</b>	<b>Social Media</b>
	Facebook
	X (Twitter)
	Vimeo
	YouTube
	<b>Professional Cloud Storages</b>
	Adobe Creative Cloud
	Amazon S3 Glacier
	Microsoft Azure Storage
	Tencent
	Lucidlink Cloud NAS
	Google Cloud Storage
	IBM Cloud Object Storage
	Generic S3 storages
	<b>Consumer Cloud Storages</b>
	Apple I Cloud Drive
	Dropbox
	Google Drive
Microsoft One Drive	

**Supported File Outputs**

**Outputs**

<b>OnPrem</b>	Avid ISIS / Nexis
	Avid Unity™ MediaNetwork



**Outputs**

<b>OnPrem</b>	DDP – Dynamic Drive Pool
	Facilis TerraBlock
	Harmonic MediaGrid
	Editshare EFS
	NAS / SAS (SMB 2.0 and 3.0)
	Quantum StorNext
	ScaleLogic NX2 & ZX NAS Storage
	EMC Isilon
	QNAP
	Studio Network Solutions EVO
	Oracle Storage
	Netapp
	FTP Servers (List on request)
	Generic File Shares
<b>Cloud</b>	<b>Consumer Cloud Storages</b>
	Apple I Cloud Drive
	Dropbox
	Google Drive
	Microsoft One Drive
	<b>Multiple and Adaptive bitrates for the OTT * Optional</b>
	<b>Professional Cloud Storages</b>
	Adobe Creative Cloud
	Amazon S3 Glacier
	Microsoft Azure Storage
	Tencent
	Lucidlink Cloud NAS
	Google Cloud Storage
	IBM Cloud Object Storage
	Generic S3 storages
	<b>Social Media *Optional</b>
	Facebook
	X (Twitter)
	Vimeo
	YouTube

**Supported Live Outputs**

**Outputs**

<b>Live</b>	<b>Social Media *Optional</b>
	Facebook
	Twitch
	X (Twitter)
	Vimeo
	YouTube
<b>Multiple and Adaptive bitrates for the OTT *Optional</b>	

**Formats**

**Input Formats**

**Input Video Formats**

ARRI ARRIRAW
Blackmagic RAW
Digital Cinema Packages (DCP)
RED Digital Cinema
IMX 30/40/50 Mbps
MPEG2 LGOP 18/25/35 Mbps 4:2:0
MPEG2 LGOP 50/70 Mbps 4:2:2
MPEG2 LGOP 422 50 Mbps
MPEG2 LGOP 420 1440x1080 35 Mbps
MPEG2 LGOP 420 (FULL) 35 Mbps
DVCAM 25 Mbps

### Input Video Formats

XAVC Intra 50 / 100 Mbps
XAVC Intra 300 / 300 VBR / 480 / 480 VBR Mbps
XAVC LGOP 25 / 35 / 50 Mbps
XAVC LGOP 60 / 100 / 140 / 150 / 200 Mbps
DVCPRO 25/50 Mbps / DVCPRO HD 100 Mbps
AVC-Intra 50/100 Mbps
AVC-Intra 200 Mbps
AVC-Intra 2K422
AVC-Intra 4K422
AVC Ultra (LGOP 6/12/25/50 Mbps)
DNxHD (SQ/HQ/HQX/LB)
DNxHR (SQ/HQ/HQX/LB)
H.264 4320P 80 - 150 Mbps High Profile
H.264 4320P 150 - 280 Mbps High Profile
H.264 2160p 35 - 68 Mbps High Profile
H.264 1440p 16 - 24 Mbps High Profile
H.264 1080p 8 - 12 Mbps High Profile
H.264 720p 5 - 7.5 Mbps High Profile
H.264 480p 2.5 - 4 Mbps High Profile
H.264 360p 1 - 1.5 Mbps High Profile
H.264 2160p 13 - 51 Mbps High Profile (Live)
H.264 1440p 6 - 18 Mbps High Profile (Live)
H.264 1080p 3 - 9 Mbps High Profile (Live)
H.264 720p 1.5 - 6 Mbps High Profile (Live)
H.264 480p 0.5 - 2.0 Mbps High Profile (Live)
H.264 360p 0.4 - 1.0 Mbps High Profile (Live)
H.264 240p 0.3 - 0.7 Mbps High Profile (Live)
H.264 L10 10 Mbps
H.264 MOG 1Mbps
H.265/HEVC 10 Mbps LGOP
H.265/HEVC 25 Mbps LGOP
H.265/HEVC 50 Mbps LGOP
H.265/HEVC 100 Mbps LGOP
H.265/HEVC 4K 25 Mbps LGOP
H.265/HEVC 4K 50 Mbps LGOP
H.265/HEVC 8K 25 Mbps LGOP
H.265/HEVC 8K 50 Mbps LGOP
H.265/HEVC 8K 100 Mbps LGOP
H.265/HEVC 4:2:2 LGOP
H.265/HEVC 4K 4:2:2 LGOP
H.265/HEVC 8K 4:2:2 LGOP
MPEG-5 EVC Baseline Profile
MPEG-5 EVC Main Profile
MPEG VVC/H266 Main Profile
ProRes 422 (SQ/HQ/LT)
ProRes 4444
ProRes 4444XQ
JPEG 2000 (Full HD)
JPEG 2000 (4K)
JPEG 2000 (8K)
Google® VP6 / VP7 / VP8 / VP9 (Full HD)
Google® VP9 (4K)
Google® VP9 (8K)
Uncompressed UYVY 422 / V210 / RGBA
AOMedia Video 1 (Full HD)
AOMedia Video 1 (4K)
AOMedia Video 1 (8K)
IMF (JPEG 2000 @ Full HD)
IMF (JPEG 2000 @ 4K)
IMF (JPEG 2000 @ 8K)

## Output Formats

### Output Video Formats

IMX 30/40/50 Mbps  
 MPEG2 LGOP 18/25/35 Mbps 4:2:0  
 MPEG2 LGOP 50/70 Mbps 4:2:2  
 MPEG2 LGOP 422 50 Mbps  
 MPEG2 LGOP 420 1440x1080 35 Mbps  
 MPEG2 LGOP 420 (FULL) 35 Mbps  
 DVCAM 25 Mbps  
 XAVC Intra 50 / 100 Mbps  
 XAVC Intra 300 / 300 VBR / 480 / 480 VBR Mbps  
 XAVC LGOP 25 / 35 / 50 Mbps  
 XAVC LGOP 60 / 100 / 140 / 150 / 200 Mbps  
 DVCPRO 25/50 Mbps / DVCPRO HD 100 Mbps  
 AVC-Intra 50/100 Mbps  
 AVC-Intra 200 Mbps  
 AVC-Intra 2K422  
 AVC-Intra 4K422  
 AVC Ultra (LGOP 6/12/25/50 Mbps)  
 DNxHD (SQ/HQ/HQX/LB)  
 DNxHR (SQ/HQ/HQX/LB)  
 H.264 4320p 150 - 280 Mbps High Profile  
 H.264 4320p 80 - 150 Mbps High Profile  
 H.264 2160p 35 - 68 Mbps High Profile  
 H.264 1440p 16 - 24 Mbps High Profile  
 H.264 1080p 8 - 12 Mbps High Profile  
 H.264 720p CBR - 6.5 Mbps High Profile  
 H.264 720p 5 - 7.5 Mbps High Profile  
 H.264 480p 2.5 - 4 Mbps High Profile  
 H.264 360p 1 - 1.5 Mbps High Profile  
 H.264 2160p 13 - 51 Mbps High Profile (Live)  
 H.264 1440p 6 - 18 Mbps High Profile (Live)  
 H.264 1080p 3 - 9 Mbps High Profile (Live)  
 H.264 720p 1.5 - 6 Mbps High Profile (Live)  
 H.264 480p 0.5 - 2.0 Mbps High Profile (Live)  
 H.264 360p 0.4 - 1.0 Mbps High Profile (Live)  
 H.264 240p 0.3 - 0.7 Mbps High Profile (Live)  
 H.264 1080p CBR 15 Mbps MAIN Profile  
 H.264 480p CBR 2.3 Mbps MAIN Profile  
 H.264 360p CBR MAIN Profile  
 H.264 432p CBR MAIN Profile  
 H.264 576p CBR MAIN Profile  
 H.264 720p CBR MAIN Profile  
 H.264 1080p CBR MAIN Profile  
 H.264 576p CBR - 3 Mbps MAIN Profile  
 H.264 720p CBR - 4 Mbps MAIN Profile  
 H.264 1080p CBR - 5Mbps MAIN Profile  
 H.264 15-30 Mbps MAIN Profile  
 H.264 L10 10 Mbps  
 H.265/HEVC LGOP 4:2:2  
 H.265/HEVC 10 Mbps LGOP  
 H.265/HEVC 25 Mbps LGOP  
 H.265/HEVC 50 Mbps LGOP  
 H.265/HEVC 100 Mbps LGOP  
 H.265/HEVC 4K 25 Mbps LGOP  
 H.265/HEVC 4K 50 Mbps LGOP  
 H.265/HEVC 8K 25 Mbps LGOP  
 H.265/HEVC 8K 50 Mbps LGOP  
 H.265/HEVC 8K 100 Mbps LGOP  
 MPEG-5 EVC Baseline Profile  
 MPEG VVC/H266 Main Profile  
 ProRes 422 (SQ/HQ/LT)  
 ProRes 4444

**Output Video Formats**

- ProRes 4444XQ
- JPEG 2000 (Full HD)
- JPEG 2000 (4K)
- JPEG 2000 (8K)
- Google® VP6 / VP7 / VP8
- Google® VP9 (Full HD)
- Google® VP9 (4K)
- Google® VP9 (8K)
- Uncompressed UYVY 422 / V210 / RGBA
- AOMedia Video 1 (Full HD)
- AOMedia Video 1 (4K)
- AOMedia Video 1 (8K)
- IMF (JPEG 2000 @ Full HD)
- IMF (JPEG 2000 @ 4K)
- IMF (JPEG 2000 @ 8K)

**Proxy Formats**

**Output Proxy Formats**

- H.264 @ 500 Kbps Flash
- H.264 @ 486p 1 / 1.5 Mbps Flash
- H.264 360p @ 1.6 Mbps Flash
- H.264 720 480p @ 8 / 10 Mbps Flash
- H.264 720p @ 8 / 15 / 16 / 20 / 24 / 25 Mbps Flash
- H.264 854 480p @ 8 / 10 Mbps Flash
- H.264 960 540p @ 3 Mbps Flash
- H.264 1080p @ 8 / 15 / 16 / 20 / 24 / 25 Mbps Flash
- H.264 SD @ 4 / 8 / 15 / 20 / 25 Mbps
- H.264 480p @ 0.5 - 2 Mbps High Profile (Live)
- H.264 360p @ 0.4 - 1 Mbps High Profile (Live)
- H.264 240p @ 0.3 - 0.7 Mbps High Profile (Live)
- ProRes Proxy 1920x1080
- ProRes Proxy 1280x720
- ProRes Proxy 960x540
- ProRes Proxy SD (16:9 Raster)
- ProRes Proxy SD
- MPEG-1 (layer 2) @ 1.5 Mbps
- Avid MPEG-2 (SIF @ 2Mbps)
- H.264 Interplay Web (SD, 800 Kbps, and 2 Mbps)
- Sony Proxy AV (MPEG-4 Part-2) @1.5 Mbps

**OTT Formats \***

**Output OTT Formats**

- H.264 1080p 8 - 12 Mbps High Profile
- H.264 720p 5 - 7.5 Mbps High Profile
- H.264 480p 2.5 - 4 Mbps High Profile
- H.264 360p 1 - 1.5 Mbps High Profile
- H.264 1080p 3 - 9 Mbps High Profile (Live)
- H.264 720p 1.5 - 6 Mbps High Profile (Live)
- H.264 480p 0.5 - 2.0 Mbps High Profile (Live)
- H.264 360p 0.4 - 1.0 Mbps High Profile (Live)
- H.264 240p 0.3 - 0.7 Mbps High Profile (Live)
- H.264 360p CBR MAIN Profile
- H.264 432p CBR MAIN Profile
- H.264 576p CBR MAIN Profile
- H.264 720p CBR MAIN Profile
- H.264 1080p CBR MAIN Profile
- H.264 576p CBR - 3 Mbps MAIN Profile
- H.264 720p CBR - 4 Mbps MAIN Profile
- H.264 1080p CBR - 5Mbps MAIN Profile
- H.265/HEVC 10 Mbps LGOP
- H.265/HEVC 25 Mbps LGOP
- H.265/HEVC 50 Mbps LGOP

### Output OTT Formats

- H.265/HEVC 100 Mbps LGOP
- H.265/HEVC LGOP 4:2:2
- Google® VP9 (Full HD)
- Google® VP9 (4K)

\* Optional output

### Product Integrations

Editing Sytems	MAM / PAM / DAM	Cameras	Consumer Cloud Storages
Adobe Premiere Pro	CatDV MAM	Canon (DSLR5D, DSLR 7D)	Dropbox
AVID Media Composer	CatDV PAM	Canon (DSLR C300, DSLR C100)	Google Drive
AVID Media Central UX	CatDV DAM	ARRI Alexa XT (ARRIRAW)	Microsoft One Drive
AVID Media Central Cloud UX	eMAM Media Asset Management	Panasonic AU-EVA1	Apple I Cloud Drive
Apple Final Cut Pro X	Telestream: Masstech	Panasonic GH5 Cameras	<b>CDN's</b>
Edius: Pro 8, Workgroup 9	AVID Interplay	Panasonic CX350 HEVC	Lumen
BlackMagic: DaVinci Resolve Studio	AXLE MAM	Ikegami Gfpack	Fastly
Autodesk: Flame	Editshare Flow	JVC AVC HD camera models	Akamai Technologies
<b>Storage</b>	MOG Vizzi	LUMIX DC-S1H	Microsoft Azure
AVID ISIS Storage	<b>Structures</b>	RED Digital Cinema	Cloudflare
AVID Nexis Storage	XAVC Structures	GOPRO	Limelight Networks
Avid Unity™ MediaNetwork	<b>Professional Cloud Storages</b>	<b>Card Readers</b>	Amazon CloudFront
Dynamic Drive Pool SAN Storage	Adobe Creative Cloud	Panasonic P2 (AJ PCD 2 / AJ PCD 20/30/35)	BootstrapCDN
Facilis Terrablock	Amazon EC2	Panasonic P2 (AJ MPD1)	StackPath
Harmonic MediaGrid	Amazon S3	Panasonic P2 (AU-XP1E / AU-XP3EJ)	KeyCDN
Quantum: Storenext	Amazon S3 Glacier	Panasonic P2 (AG HPG 20)	Rackspace
Scalelogic: NX2 & ZX NAS Storage	Microsoft Azure Storage	Sony XDCAM EX (SxS Cards): SBAC-US10/20/30	Alibaba Cloud Content Delivery Service
Editshare EFS	Microsoft Azure Virtual Machines	Sony XDCAM EX (SxS Cards): SBAC-UT100	CacheFly
EMC: Isilon	Tencent: Cloud Storage	Sony XDCAM EX (SxS Cards): MRW E-80	Verizon
QNAP	Lucidlink Cloud NAS	Sony XDCAM EX (SxS Cards): MRW E-90	<b>Social Media *Optional</b>
Studio Network Solutions: EVO	Google Cloud Storage	Sony Disc Reader: PDW-U1, PDW-U2	Facebook
Oracle Storage	IBM Cloud Object Storage	<b>VTR Decks</b>	Twitch
Netapp	Generic S3	XDCAM HD: Disc (PDW 1500, PDW HD1500)	X (Twitter)
<b>Archive</b>	<b>Hyperversers</b>	XDCAM HD: Disc (PDW F70)	YouTube
Archiware P5	Microsoft HyperV	XDCAM Station (XDS1000)	Vimeo
Xendata Archive Appliances	VMWare ESX	<b>Transfer Acceleration Protocols</b>	
Oracle Front Porch Digital DIVArchive		File Catalyst Direct	
		IBM: Aspera File Transfer	

## Minimum Hardware Requirements

### To ingest and transcode in UHD

Features	Specs
<b>CPU</b>	2x Intel Xeon Gold 6342 2.8G or above
<b>RAM</b>	16x 8GB DDR4
<b>OS Drive</b>	480GB SSD
<b>Network</b>	2x 10 Gb Ethernet Port + 2x 1 Gb Ethernet Port
<b>Hardware Encoders (Recommendation)</b>	2x Nvidia A2 (H.264)
<b>Operating System</b>	Windows 10 IOT LTSC or SAC

### To ingest and transcode in FHD

Features	Specs
<b>CPU</b>	2x Intel Xeon Silver 4314 2.4G or above
<b>RAM</b>	8x 8GB DDR4
<b>OS Drive</b>	480GB SSD
<b>Network</b>	2x 10Gb Ethernet Port + 2x 1 Gb Ethernet Port
<b>Hardware Encoders (Recommendation)</b>	1x Nvidia A2 (H.264)
<b>Operating System</b>	Windows 10 IOT LTSC or SAC

## Concurrent Media Operations

With mCODER, it is possible to run different media operations simultaneously, thus guaranteeing distinct arrangements to meet the challenging media day-to-day activities.

Media operations include ingest, transcoding, and file preview.

By default, it is designed to accommodate the simultaneous execution of up to 2 media operations simultaneously. However, its extensive scalability provides the flexibility to incorporate additional operations based on your specific requirements. This versatility allows you to perfectly combine the operations shown in the table below:

Concurrent Media Operations	
<b>Ingest &amp; Transcode</b>	<b>File Preview</b>
Includes 2 media operations *	Up to 5 files preview

\* Can be scalable

## Product

Part Number	Product	Description
mcsww	mCODER Software	File ingest system with a scalable limit of media operations

## Available Options

Choose from the products below to customize the mCODER according to your business rules.

### Production Tools

Tools for asset management and workflow orchestration.



#### mPAM

Benefit from a state-of-the-art content and production asset manager tool with mPAM. Streamline daily operations and empower your creative teams with the right tools to find, manage, track, enhance and deliver media files throughout the entire production ecosystem from a single interface.

Part Number	Product	Description
mpam1usw	mPAM	Content and production asset manager per licensed user

**Note:** Adding optional features might affect the number of simultaneous operations.

### Add-ons

Input option to complement your workflows.

Part Number	Product	Description
mcswwac	Additional operation	Scale the number of operations

**Note:** Adding optional features might affect the number of simultaneous operations.

Output options to complement your workflows.

Part Number	Product	Description
oasasw	OTT & Social media	Multiple output resolutions for OTT & Simultaneous social media shares
oasaacsw	Additional OTT & Social media channel	Scale the number of OTT & Social media channels

**Note:** Adding optional features might affect the number of simultaneous operations.

### Plugins

Complement any media production and distribution workflow with turnkey plugins and extensions.



#### Social-m

Quickly fetch and publish your live or VoD contents to social media.

This social media plugin for Chrome will let users ingest media without having to access the mCODER GUI, allowing the content to be ready for editing or any other task, in no time. Simply open the plugin, insert the URL and run the workflow to fetch your video, with option to preserve metadata.

Part Number	Product	Description
smpi	Social-m plugin	Social media capture & Publishing

**Note:** Adding optional features might affect the number of simultaneous operations.

### Hardware

Customize your solution to your day-to-day media needs.

Part Number	Product	Description
-	AVC encoder card	To enable the AVC-Ultra hardware encoder accelerator (Supplier market price)

**Note:** Adding optional features might affect the number of simultaneous operations.

### Artificial Intelligence

Artificial intelligence engine to boost and facilitate media tasks even more.

Default (already included)	
Black frames detection	Voice activity detection
Video freeze detection	Silence detection
Black margins detection	Loudness detection
Audio clipping detection	Loudness balance
Audio mute detection	Vehicle detection
Audio phase detection	License plate detection
Audio mono detection	Concept tagger
Timecode gap detection	Bouncing boxes
Scene change detection	Update existing interplay entry with new metadata
Transformation	
Frame rate conversion	Crop black margins
Remove audio clicks	AI upscale
Remove audio clipping	Blur license plates

Additional AI Operations	
Part Number	Product
mcswaifr	Face Recognition and Age Prediction
mcswaiod	Object Detection
mcswaicr	Optical Character Recognition
mcswaisr	Speech Recognition

**Note:** Adding optional features might affect the number of simultaneous operations.

Contact our sales team at [sales@mog-technologies.com](mailto:sales@mog-technologies.com) to find out how to purchase or in case you need more information.

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