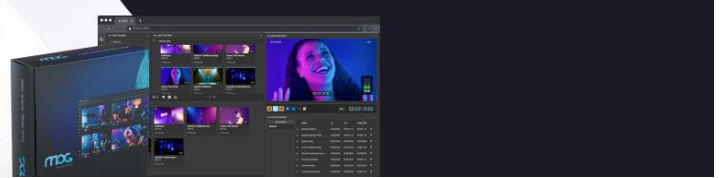


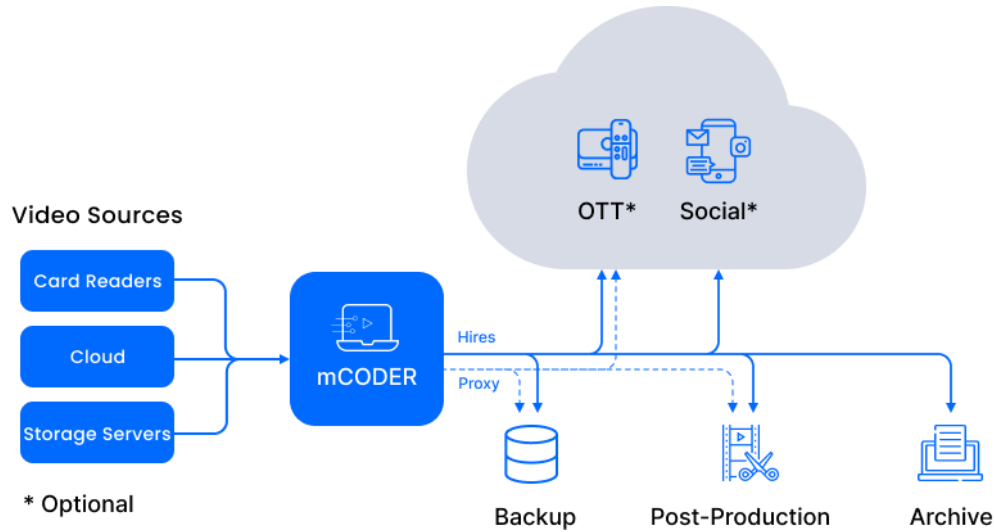
## mCODER Software



### 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)

Schedule Automatic Jobs  
Schedule Gang Captures  
Schedule Playouts  
Schedule Maintenance Tasks (Reboot, Export Logs, Export Full Backup)  
Edit individual events  
Export activity 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

### 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  
Pause File Based ingest operations  
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

## Features

- 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
- 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

## Features

- 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
- Override start timecode
- Index clips with same name but with different metadata
- Exclude file extensions from File inputs

### 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

## Features

### Video

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

### Object

- 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

### Orchestration

- Orchestration View for output workflows
- Services Menu that eases Group and Cluster Configuration while displaying running services per node

### 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

## Features

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

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

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	
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
	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-XP1E / AU-XP3EJ
	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
Cloud	<b>Social Media</b>
	Facebook
	X (Twitter)
	Vimeo
	YouTube
	<b>Professional Cloud Storages</b>
	Adobe Creative Cloud
	Amazon S3 Glacier
	Microsoft Azure Storage
	Tencent



Inputs	
Cloud	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	
OnPrem	Avid ISIS / Nexis
	Avid UnityTM 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
	FTP Servers (List on request)
	Generic File Shares
Cloud	<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	
Live	<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)  
Digital Picture Exchange (DPX)  
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  
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

### Input Video Formats

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

Output Video Formats
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
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
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	CDN's
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
Storage	MOG Vizzi	LUMIX DC-S1H	Microsoft Azure
AVID ISIS Storage	Structures	RED Digital Cinema	Cloudflare
AVID Nexis Storage	XAVC Structures	GOPRO	Limelight Networks
Avid UnityTM MediaNetwork	Professional Cloud Storages	Card Readers	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-XPDI1E / AU-XPDI3EJ)	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	Social Media *Optional
Studio Network Solutions: EVO	Google Cloud Storage	Sony Disc Reader: PDW-U1, PDW-U2	Facebook
Oracle Storage	IBM Cloud Object Storage	VTR Decks	Twitch
Netapp	Generic S3	XDCAM HD: Disc (PDW 1500, PDW HD1500)	X (Twitter)
Archive	Hypervisers	XDCAM HD: Disc (PDW F70)	YouTube
Archiware P5	Microsoft HyperV	XDCAM Station (XDS1000)	Vimeo
Xendata Archive Appliances	VMWare ESX	Transfer Acceleration Protocols	
Oracle Front Porch Digital DIVArchive		File Catalyst Direct	
		IBM: Aspera File Transfer	

## Minimum Hardware Requirements

### To ingest and transcode in UHD

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

### To ingest and transcode in FHD

Features	Specs
CPU	2x Intel Xeon Silver 4314 2.4G or above
RAM	8x 8GB DDR4
OS Drive	480GB SSD
Network	2x 10Gb Ethernet Port + 2x 1 Gb Ethernet Port
Hardware Encoders (Recommendation)	1x Nvidia A2 (H.264)
Operating System	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	
Ingest & Transcode	File Preview
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
mcswac	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
mcswaivr	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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