

Application note

4K/5K Video Editing by
Final Cut Pro / Adobe Premiere Pro
on **PROMISE New Pegasus32**

Version:0.9
Date:2019/12/24



Contents

1.Scope	P3
2.Executive Summary	P3
3.Use Scenario	
3.1 Configuration and Topology	P4
3.2 Test Procedure Summary	P5
4.Test Results and Conclusion	P6
5.Testimonials from the Field	P6
6.Conclusion	P7

1. Scope

This document highlights the high-performance of Promise Pegasus32, which supports digital editing for 4K/5K Video formats by Apple Final Cut Pro X via Thunderbolt™ 3 and Proxy editing by Adobe Premiere Pro via USB3.2 Gen2. Pegasus32 is a revolutionary product to connect a Thunderbolt™ 3 enabled host at 40Gbps; or a USB 3.2 Gen 2 enabled host at 10Gbps! Hardware RAID of Pegasus32 protects your files simultaneously while creating, editing, and viewing live video streams.



2. Executive Summary

The 112TB Promise Pegasus32 R8 Storage lets you edit the ingested data from 4/5K cameras. Promise hardware RAID technology provides up to 1600 or 2400MB/s speeds with HDD or SSD in R8 Storage. This performance will slash time off in your post-production workflow and make editing multiple of streams ProRes 422 (HQ) as well as ProRes 4444 XQ video possible, using Apple Final Cut Pro X and Adobe Premiere Pro.

Additionally, Pegasus32 R8 enables dual 4K display connection with Display Port and/or Thunderbolt™ 3 daisy chain. Using multiple displays you can dedicate one the timeline and the other to preview 4K footage on your workspace.



3.Use Scenario

This document focused on both Mac OS X platform via Thunderbolt™ 3 connection and Windows platform via USB 3.2 Gen 2 interface; using Apple Final Cut Pro and Adobe Premiere Pro.

This test cycle compares Pegasus 32 performance equipped with HDD and SSD on A/V environment applications. Multiple-stream playback, multiple-camera editing and addition of video/audio overlay were applied in this test.

A/V Streaming Passing Criteria is set to no frame drop on 5120 x 2700 30/60 FPS, 3840 x 2160 30/60 FPS video format for ~1 hour streaming under multiple streams playback and editing via Thunderbolt™ 3.

To ensure simultaneous and hassle-free editing of your works, RAID rebuilding is tested while single HDD failure under RAID5. A/V applications continued to operate without frame drop.



3.1 Configuration and Topology



System configuration on Mac Platform

Platform OS	Mac OSX 10.14.6
Platform Spec	iMac Pro CPU: 3.2GHz 8-core Intel Xeon W processor Memory: 32GB GPU: Radeon Pro Vega 56
Application SW	Final Cut Pro 10.4.3
File System	AFPS
Storage Spec	Pegasus32 R8
Storage Configuration	Toshiba 12TB HDD * 8 → Build Raid 5 Samsung 860 500GB SSD * 8 → Build Raid 5 (Using default Stripe/Sector size)
Video Formats	3840 x 2160, 30/60FPS, ProRes 4444 XQ 5120 x 2700, 30/60FPS, ProRes 4444 XQ
Interface Type	Thunderbolt

System configuration on Windows Platform

Platform OS	Windows 10 Pro (version: 1909)
Platform Spec	CPU : 8th Generation Intel CoreTM i7-8750H Memory : 8GB DDR4-2666 SODIMM(DIMM*4) HDD : 1TB 7200RPM (M.2*2+2.5"*1) GPU:NVIDIA Quadro P1000(4GB GDDR5)
Application SW	Adobe Premiere Pro CC 2020
File System	NTFS
Storage Spec	Pegasus32 R6
Storage Configuration	Toshiba 12TB HDD * 6 → Build Raid 5 (Using default Stripe/Sector size)
Video Formats	3840 x 2160, 30/60FPS, ProRes 4444 XQ 5120 x 2700, 30/60FPS, ProRes 4444 XQ
Interface Type	USB 3.1 Gen2

3.2 Test Procedure Summary

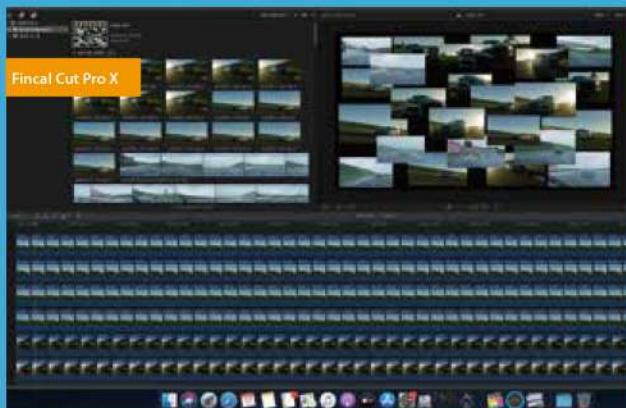
For split screen projects, the monitor screen space is split into two, four, sixteen or more screens. Multiple clips must be viewable simultaneously with ability to edit.

1.Import media and create a new sequence

Import clips from media browser and stack them into the sequence.

2.Add crop effect on clips one by one

Turn off other tracks and crop each track, adding effects and compositing multiple tracks.



3.Use crop effect on effects panel

Adjust the position and scale of the clips to fit into the screen.

4.Animate the split screen

Animate each clip on and off by keyframing the motion setting.



Interview-based and live-event production often utilize multiple cameras and angles for segment recording. Multi-camera editing with Pegasus32 allows you to quickly sync and align footage, and select the angle for video plays.

Create multi-cam sequences and use overlay settings.

1.Create a project and Import footage

Select open a new project and the files to import.

2.Create a multi-camera source sequence

Select assets and choose a sync method from the Create Multi-camera Source Sequence.

3.Create a multi-camera target sequence

Create a multi-camera target sequence; open it in the Program Monitor and Timeline panel.



4.Enable and Edit the multi-camera sequence

View the footage of all cameras simultaneously and Edit the multi-camera source sequence.

5.Export the multi-camera sequence

Send the sequence to Encoder for encoding.



4. Test Results and Conclusion

Pegasus32 + Final Cut Pro Test via Thunderbolt™ 3

A.Up to 4 (3840 x 2160 or 5120 x 2700) 4K/5K editing on Pegasus32 R8 HDD SKU + Final Cut Pro

Pegasus R8 (HDD, RAID5)					
Resolution	Codec	Frame Rate	Data Rate	Thunderbolt™ 3 or USB3.2	# of tracks Editing & Previewing
3840 x 2160	ProRes 4444 XQ	30FPS	1.7 Gb/s	Thunderbolt™3	4
5120 x 2700	ProRes 4444 XQ	30FPS	2.2 Gb/s	Thunderbolt™3	3

B.Up to 11 (3840 x 2160 or 5120 x 2700) 4K/5K editing on Pegasus32 R8 SSD SKU + Final Cut Pro

Pegasus R8 (SSD Model, RAID5)					
Resolution	Codec	Frame Rate	Data Rate	Thunderbolt™ 3 or USB3.2	# of tracks Editing & Previewing
3840 x 2160	ProRes 4444 XQ	30FPS	1.7 Gb/s	Thunderbolt™3	11
3840 x 2160	ProRes 4444 XQ	60FPS	3.4 Gb/s	Thunderbolt™3	5
5120 x 2700	ProRes 4444 XQ	30FPS	2.218 Gb/s	Thunderbolt™3	8
5120 x 2700	ProRes 4444 XQ	60FPS	4.4 Gb/s	Thunderbolt™3	4

C.When HDD rebuilding, 4K/5K clips on Pegasus32 R8 HDD SKU + Final Cut Pro are editable

Pegasus R8 (HDD Model, RAID5)					
Resolution	Codec	Frame Rate	Data Rate	Thunderbolt™ 3 or USB3.2	# of tracks Editing & Previewing
3840 x 2160	ProRes 4444 XQ	30FPS	1.7 Gb/s	Thunderbolt™3	2
5120 x 2700	ProRes 4444 XQ	30FPS	2.2 Gb/s	Thunderbolt™3	1

Pegasus32 + Adobe Premiere Test via USB 3.2

D.Pro Res Proxy editing via USB3.2 Gen 2 on Pegasus32 R8 HDD SKU + Adobe Premiere Pro test results

Pegasus R8 (HDD Model, RAID5)					
Resolution	Codec	Frame Rate	Data Rate	Thunderbolt™ 3 or USB3.2	# of tracks Editing & Previewing
1280 x 720	H.264	30FPS	16Mb/s	USB3.2	150~
1536 x 790	H.264	30FPS	16Mb/s	USB3.2	150~

5. Testimonials from the Field

The Promise website includes several testimonials from professional content creators and production personnel. These testimonials can refer to Promise website link shows in below:

<https://www.promise.com/NewsRoom/CaseStudy>

Please view the videos and see for yourself the enthusiasm these creative professionals have for the Pegasus32.

One testimonial entitled Digitalizing the Future for Origins Archival- Pegasus32 R8 features Justin Misch, founder of Origins Archival in Beverly Hills, CA. Origins Archival remasters 16 and 8 mm film into 4k digital, utilizing Windows PC for restoration work, and Mac for editori-

al work flow. The dual connectivity enables for more efficient work flow, saving many hours daily on every project. Their setup uses two Pegasus32 units, one utilizing RAID0 for the working drive; another with RIAD6 for redundancy and backup.

·Documentary film editor Dana Shaw describes his experience editing documentary films using Pegasus32 R8 (A Studio Visit Dana Shaw documentary editor). Dana highlights how the flexibility, performance, reliability and plug and play readiness of Pegasus32 benefits his

6. Conclusion

Pegasus32 Series delivers the capacity and performance engineered by the industry leader Promise, to help make even the most demanding creative projects easy. Pegasus32 combines lightning fast speed and advanced RAID protection to ensure your work and data are secure.

With Thunderbolt™3 and USB 3.2 Gen 2 ports, adding devices or adding dual 5K displays is fast and easy. This makes it an ideal tool for filmmakers, photographers, graphic designers and other multimedia professionals, especially on set – where speed and efficiency are crucial.

Pegasus32 Series Specifications

Model	Pegasus32 R4	Pegasus32 R6	Pegasus32 R8
	 Up to 56TB Over two hours of uncompressed 8K footage	 Up to 84TB Best value for performance, protection, and capacity	 Up to 112TB Highest capacity and protection
Form Factor	4-Bay hardware RAID enclosure	6-Bay hardware RAID enclosure	8-Bay hardware RAID enclosure
Interface	2x USB-C ports either Thunderbolt™ 3 (40Gbps) or USB 3.2 Gen 2 (10Gbps)		
RAID Level	0, 1, 5, 6, 10, JBOD	0, 1, 5, 6, 10, 50, JBOD	0, 1, 5, 6, 10, 50, 60, JBOD
Compatibility	Enabled systems with macOS 10.14 or newer and Windows 10 x64		
Capacity	up to 56TB	up to 84TB	up to 112TB
Dimensions	Height: 7.5 in / 19.2 cm Width: 7.3 in / 18.7 cm Length: 9.6 in / 24.5 cm	Height: 9.8 in / 25.1 cm Width: 7.3 in / 18.7 cm Length: 9.6 in / 24.5 cm	Height: 12.2 in / 31.0 cm Width: 7.3 in / 18.7 cm Length: 9.6 in / 24.5 cm
Weight	15 lb / 6.8 kg	20.1 lb / 9.1 kg	24.2 lb / 11 kg
Warranty	3-year warranty		
Requirements	Workstation or laptop with Thunderbolt™ 3 port or USB 3.2 port*		

0.7m Thunderbolt™ 3 / USB cable included (USB Type-C)

* One host connection at a time.



PROMISE TAIWAN

Hsinchu, Taiwan
📞 +886-3-578-2395
✉️ sales@tw.promise.com

PROMISE EUROPE

Eindhoven, The Netherlands
📞 +31-40-235-2600
✉️ sales@eu.promise.com

PROMISE MEA

Dubai, UAE
📞 +97 145571951
✉️ sales@mea.promise.com

PROMISE CHINA

Beijing, China
📞 +8610-8857-8085/8095
✉️ sales@cn.promise.com

PROMISE UNITED STATES

Milpitas, CA, USA
📞 +1-408-228-1400
✉️ sales@promise.com

PROMISE GERMANY

Dortmund, Germany
📞 +49-231-56-76-48-0
✉️ sales-de@eu.promise.com

PROMISE INDIA

Mumbai, India
📞 +91 98103 01877
✉️ sales@in.promise.com

PROMISE JAPAN

Tokyo, Japan
📞 +81-03-6801-8064
✉️ sales@jp.promise.com



Contact us

© 2020 PROMISE Technology, Inc. All Rights Reserved. PROMISE, the PROMISE logo, Pegasus, SANLink, Vess, VTrak logos are registered or pending trademarks of PROMISE Technology, Inc. in the U.S. and other countries. All other trademarks are the property of their respective owners. Information regarding products, services and offerings may be superseded by subsequent documents and are subject to change without notice. For the latest information and specifications regarding PROMISE Technology, Inc. and any of its offerings or services, please contact your local PROMISE office or the corporate headquarters.
P/N: G6130V8020000xx 2020/01/10

www.promise.com