



KONICA MINOLTA

Konica Minolta Inkjet Products for TTL printing

13th Digital Tag, Ticket, Label Printing Conference
Feb. 2, 2006

Konica Minolta IJ Technologies, Inc.

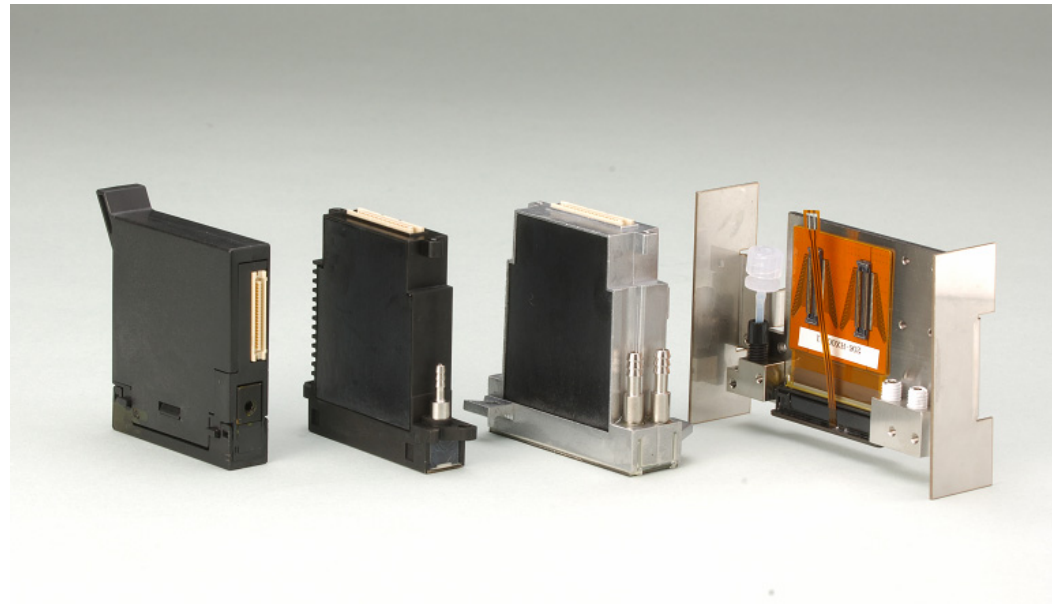
Konica Minolta Inkjet Head Family



Current Standard Models

Model	nozzle	dpi	ink	pl	KHz	built in Heater		Application
						with	without	
KM512L	512	360	Oil Solvent UV Special	42	7.6	X	X	Single-pass : 360dpi Binary
KM512M				14	12.8	X	X	Fine print image 4 Step GS / Binary
KM512S				4	20	X	(X)	High quality print : +1440 dpi 4 Step GS / Binary(upto 7dpd)

Slim Chassis, Independent Channel Type, Water-base Ink Model & Highest Accuracy Model Available



Advantages of the KM IJ Heads for TTL Printing

1. 360 nozzles/inch – Suitable for High Resolution Printing

1 head → available for 1-pass printing at 360dpi

2 heads → available for 1-pass printing at 720dpi

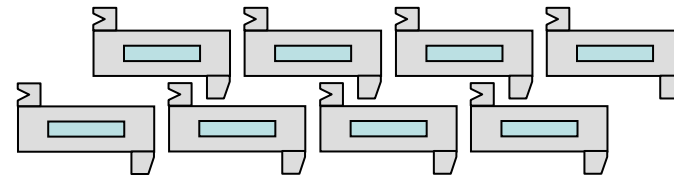
or 1-pass printing at 360dpi with double speed

2. 512 nozzles

→ high productivity

3. Stitch Arrangement Available

→ wider print area with compact print unit



4. Commonly Designed Models with Various Drop Volumes

→ adaptable to a wide range of applications

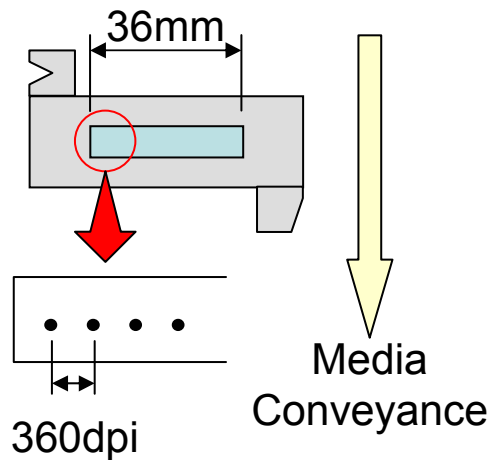
→ easy to develop a product family



Examples of Head Arrangement

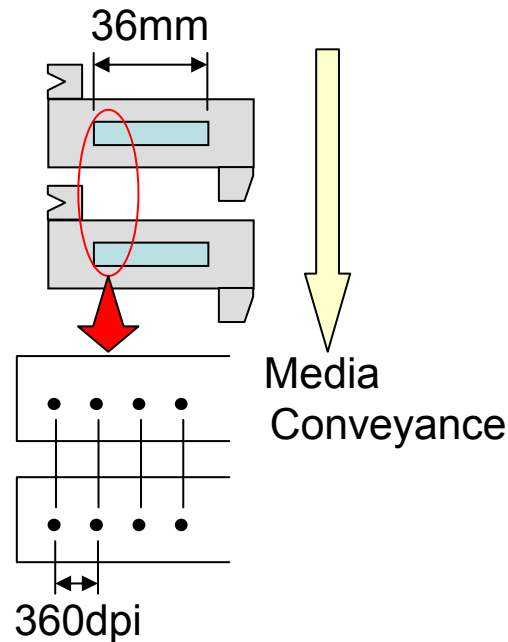
A. KM512L(40pl) x1pcs

→ 36mm, 360dpi, 500mm/s



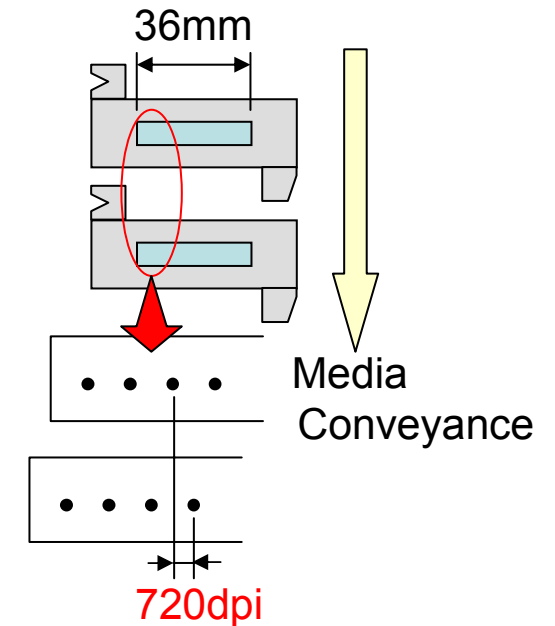
B. KM512L(40pl) x2pcs

→ 36mm, 360dpi, 1000mm/s



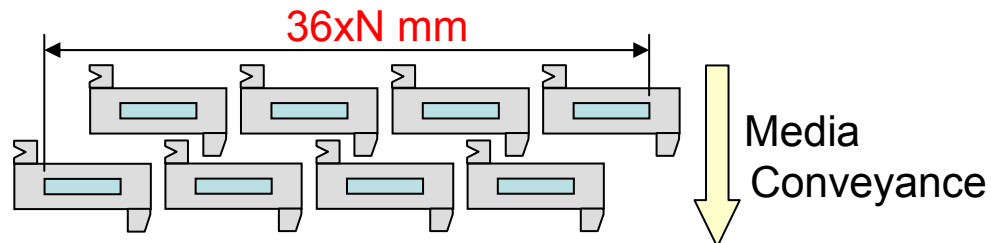
C. KM512M(14pl) x2pcs

→ 36mm, 720dpi, 450mm/s

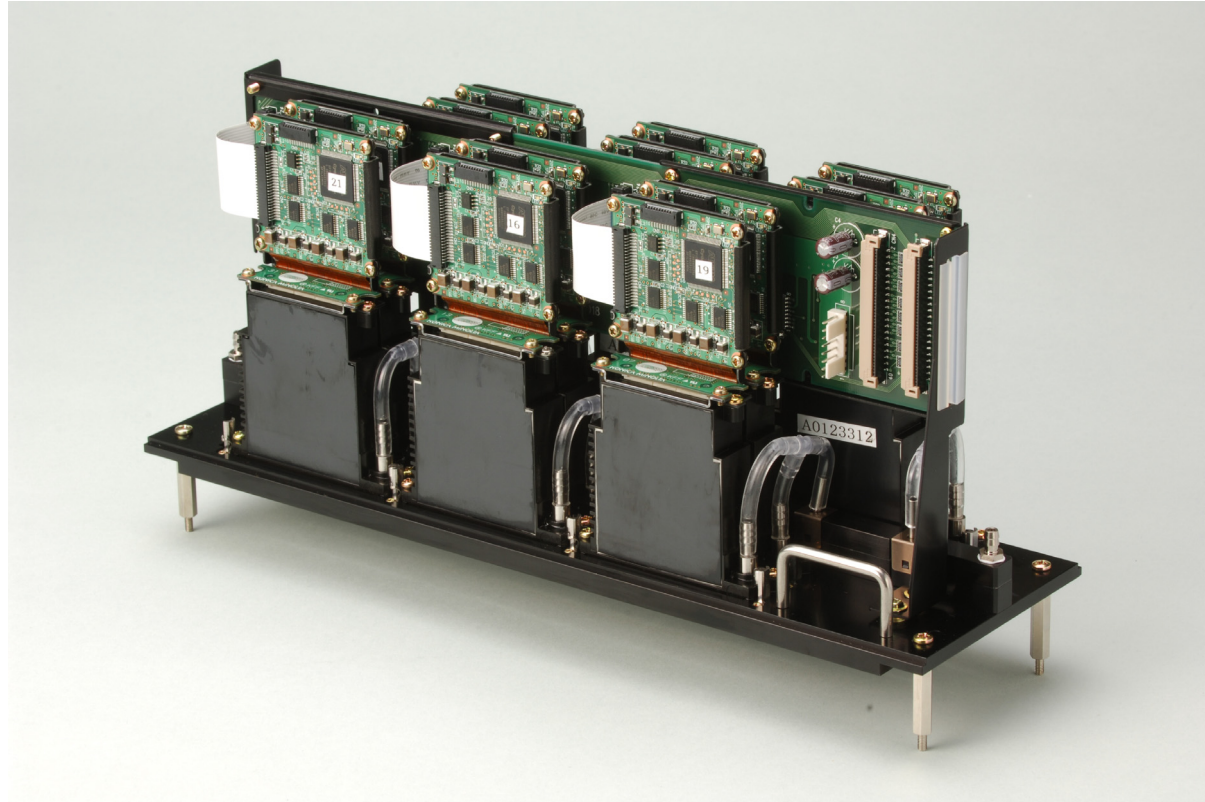


D. KM512L(40pl) x N pcs

→ 36xN mm, 360dpi, 500mm/s



720dpi Print Bar Prototype



Features:

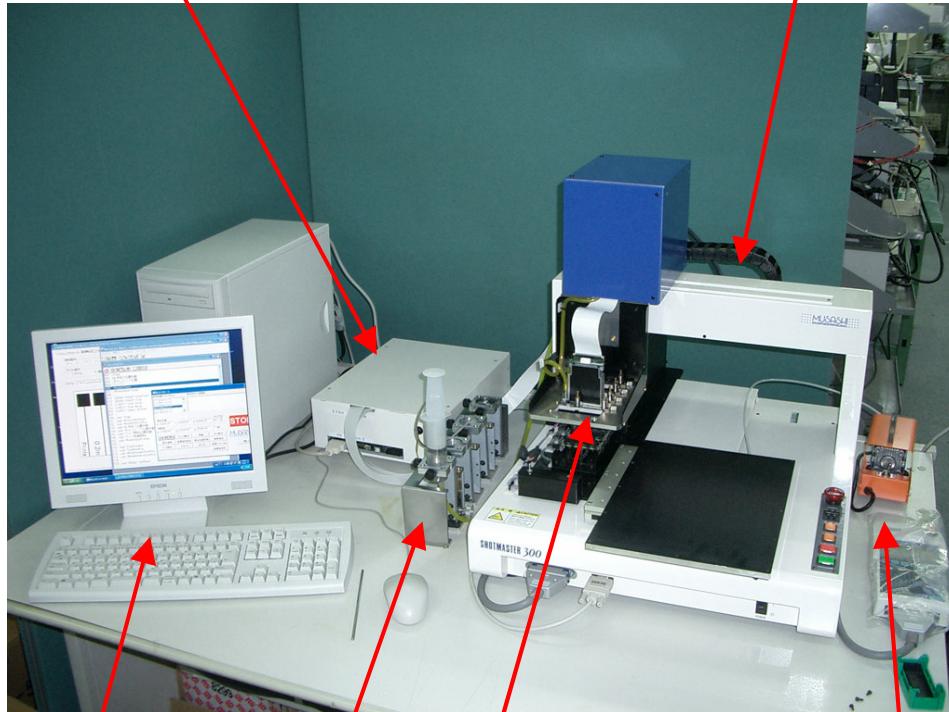
- 720dpi double stitched layout
- Slim chassis heads
- Common ink pass with inlet & outlet ports

- Print width: 216mm
- Print resolution: 720dpi
- Print speed: 450mm/s max

IJ Evaluation System EB-100

Memory Board + Head Drive Board

X-Y table (Optional)



PC + Evaluation Software

Ink Supply Cylinder (Optional)

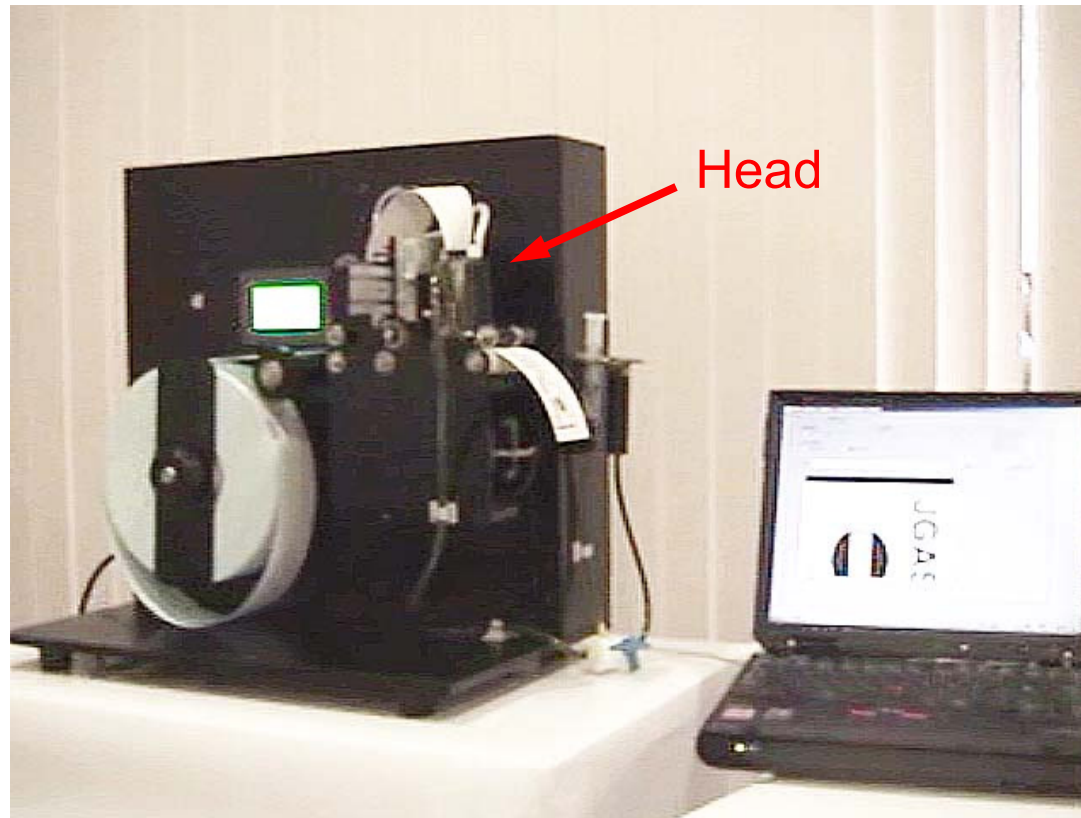
IJ Heads (up to 4pcs)

Vacuum Pump

Features:

- Flexible to test or print with your inks
- Adapt to Konica Minolta 512/256/128 nozzle series
- Capable of up to 4 heads
- Evaluation software included
- X-Y table optional

IJ Label Printer Prototype (Oil ink)



Head: KM512L (512 nozzle, 40pl) x 1pc

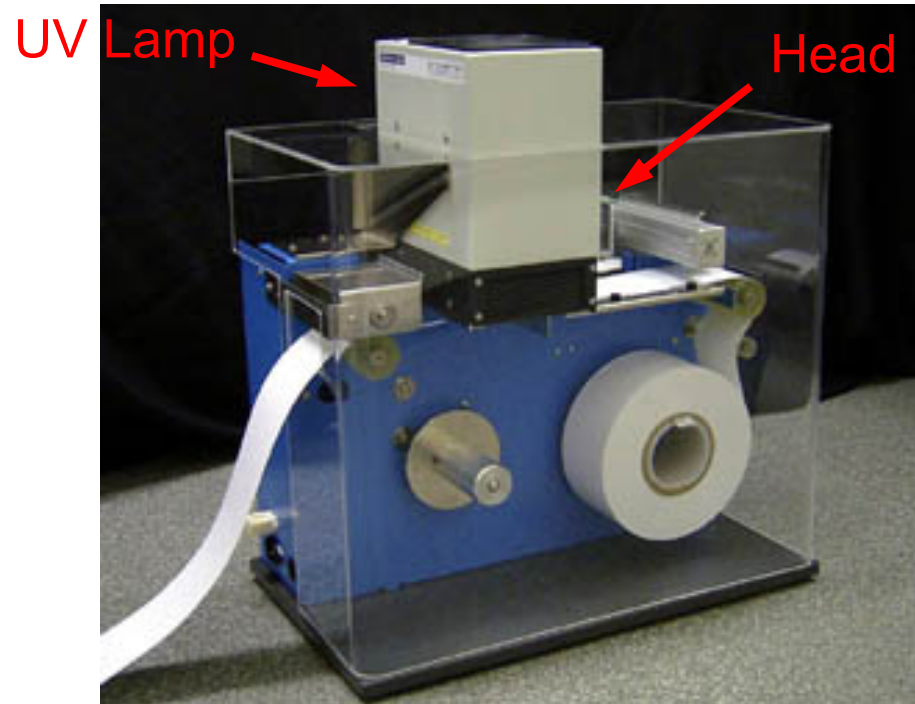
Ink: Oil ink

Print width: 36mm

Print resolution: 360dpi

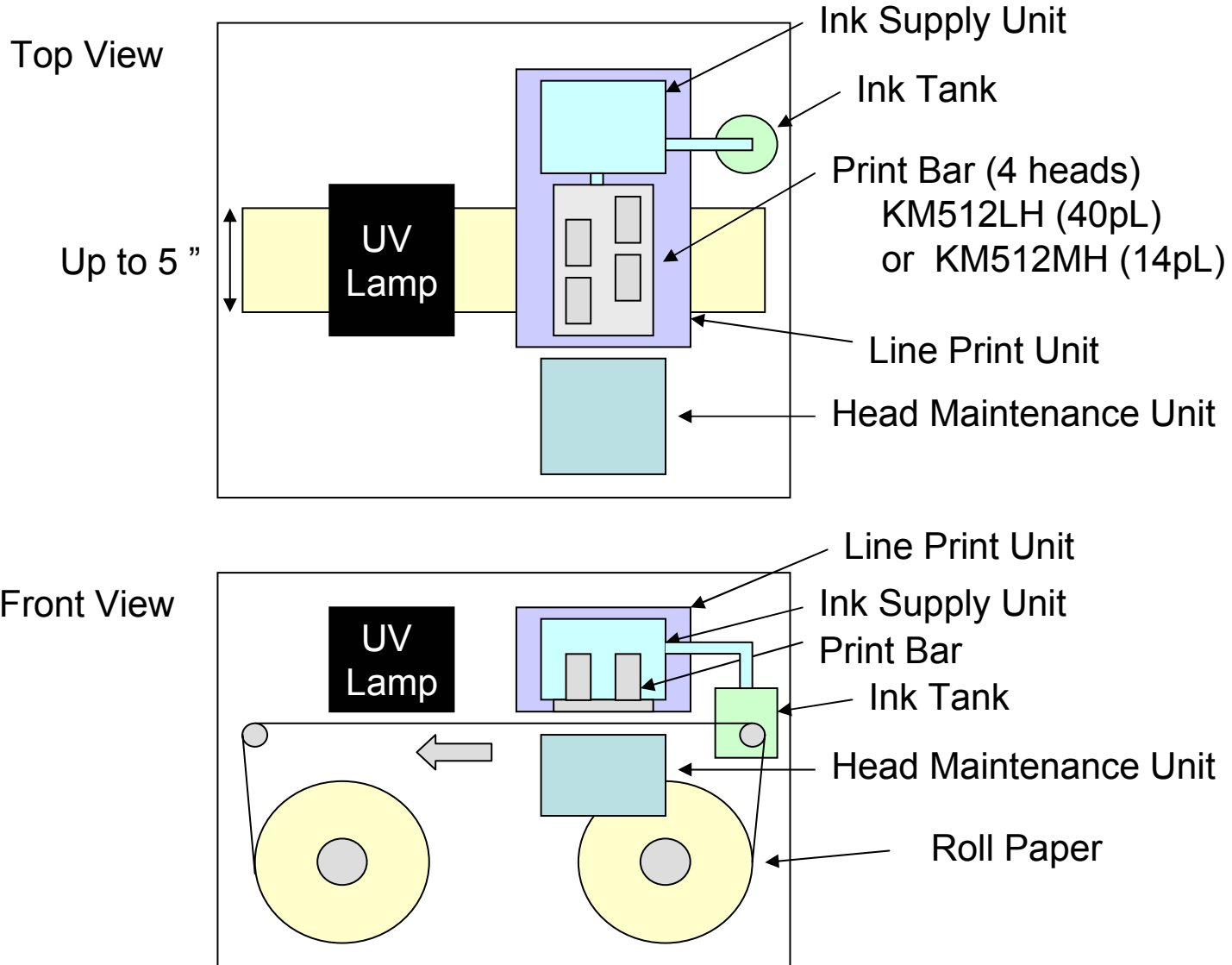
Print speed: 500mm/s max

IJ Label Printing Evaluation System (UV ink)

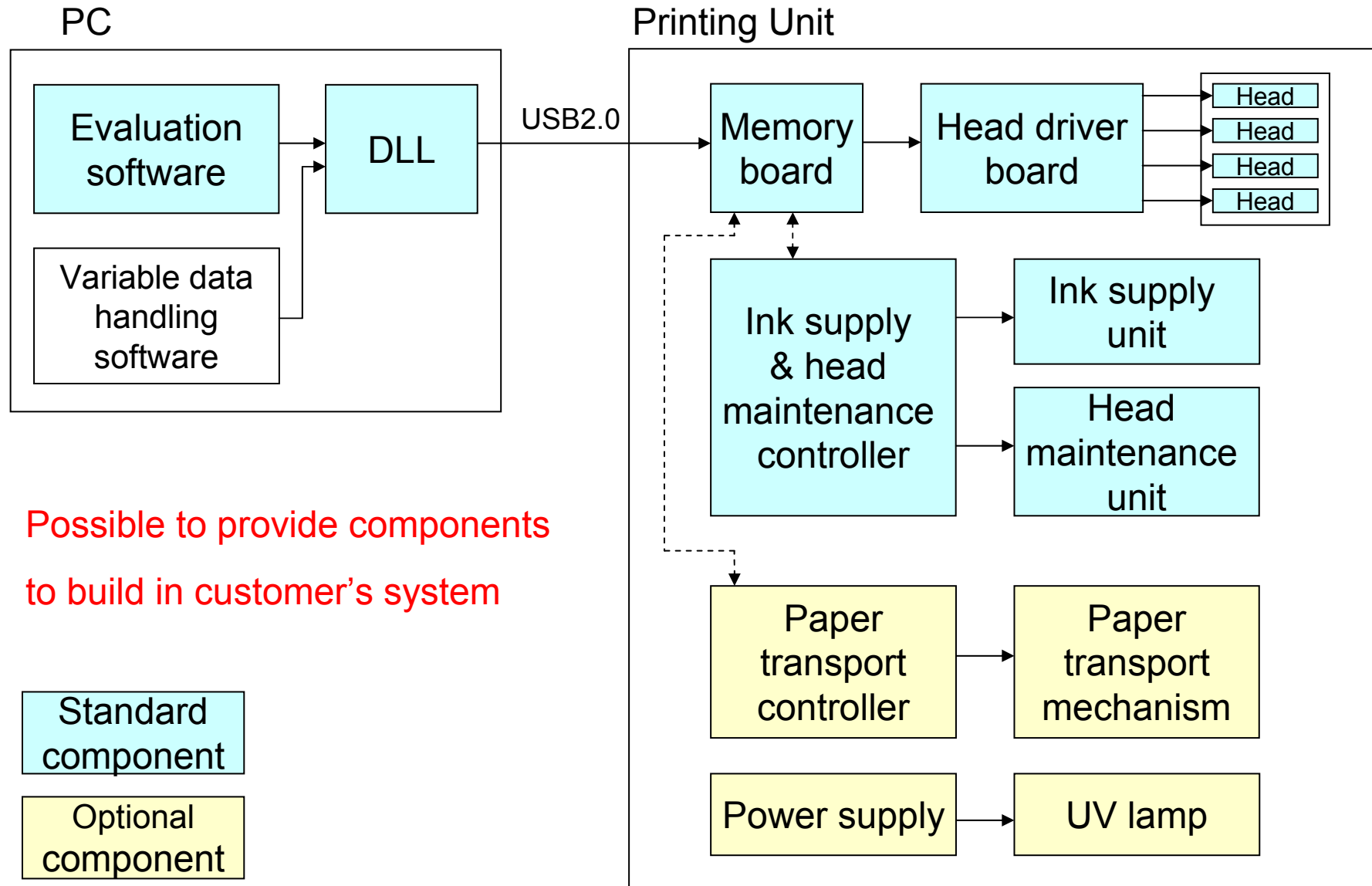


Afit KEGON-R1 with Konica Minolta IJ Head
Head: KM512LH (512 nozzle, 40pl) x 1pc
Ink: UV curable ink
Print width: 36mm
Print resolution: 360dpi
Print speed: 500mm/s max

New Evaluation System (Preliminary)



Block Diagram of New System (Preliminary)



Possible to provide components to build in customer's system

Feature

1. Good curing properties

→ Good adhesion and flexibility after curing

Good chemical resistance

High curing speed

2. Extra-low odors (both ink and print)

→ adaptable to a wide range of applications

3. Superior weather durability

→ 2 to 3 years weather proof for out-door use

4. Excellent Safety

→ No mutagenicity materials, No sensitizing materials,

Very low skin irritation



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Thank you !