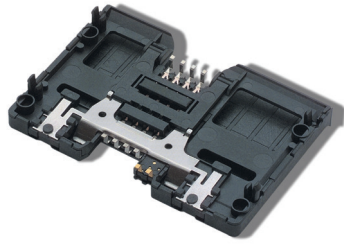


# CCM02 MK2 Series



## Features

- Operating life 500,000 cycles
- Insertion force 40N
- EMV
- PCI & PCI ready
- Card detection sealed switch

## Typical Applications

- Transaction
- Identification
- POS

## Mechanical

Number of Contacts	8
Mechanical life	500,000 cycles min
Card insertion force	10N to 40N
Card extraction force	1N min / 10N max
Contact force	0,2N / 0,50N max
Card detection switch	0,8 N max for actuation (end travel switch actuation force actuates when card is 0,9mm from card stop)
	1,8 N max for complete depression
Vibration Frequency	10 to 500 Hz. Acceleration 50m/s <sup>2</sup> Duration 6 hours - amplitude 0,35mm
Max elect. discontinuity	1µs
Shock	Peak value 500 m/s <sup>2</sup> – Duration 11 ms 3 shocks in each direction of each axis

## Packaging

Tray 30 parts / Cartons 300 parts  
Reel 120 parts

## Soldering

Compatible with lead free reflow soldering process  
For version with security cover, please contact Customer Service for soldering recommendations.

## Contact Electrical Data

Insulation resistance	1,000 MΩ min
Resistance	100 mΩ max
Current rating	10 µA min / 1 A max
Dielectric strength	750 Vrms min

## Switch Electrical Data

Card detection switch	Normally open
Contact resistance	100 mΩ max
Dielectric strength	250 Vrms min
Current rating	1 mA min / 10 mA max
Maximum power	0.2 VA

## Environmental Data

Operating temperature	-40°C to +85°C
Damp heat	IEC 512 test number 11c (10 days)
Salt mist	IEC 512 test number 11f (96 hours)

Card detection switch  
RoHS compliant

Sealed against dust

Designation	Termination	Contact Type	PCI Features		Total Height (mm)	Dimension	PCB version	Packaging
			I/O Protect	Security Cover				
CCM02-2503LFT	THT	landing			6,25	38,5 X 55,6	4 clips	Tray
CCM02-2504LFT	SMT	landing			6,25	38,5 X 55,6	4 clips	Tray
CCM02-2508LFT	SMT	landing			6,25	38,5 X 55,6	4 clips	Tray
CCM02-F508LFT	SMT	friction			6,25	36,5 X 55,6	2 plastic pegs	Tray
CCM02-F844LFT	SMT	friction	Yes	Yes	6,6	40,5 X 58	4 metal pegs	Tray / Reel

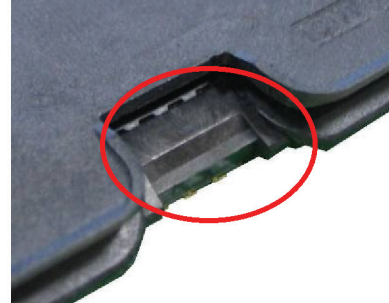
## PCI: I/O Protect

### Definition

Special accessory in order to avoid and detect frontal access to data contact. It is electrically connected to the PCB through spring finger contacts.

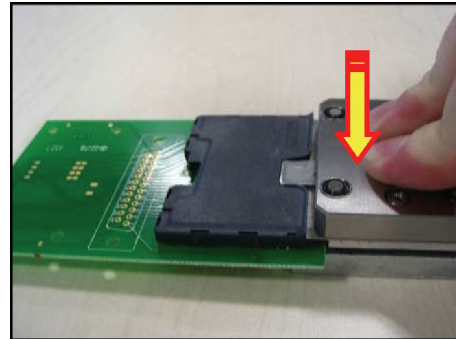
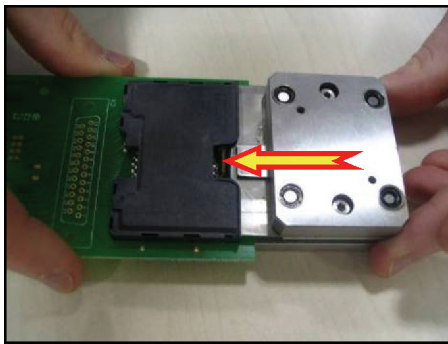
### Process

It must be in open position during the reflow soldering of the connector and has to be locked in closed position after soldering.



### I/O Protect locking tool

C&K is proposing a manual tool to lock the I/O protect accessory after soldering.  
Ordering code: C-CM02-E50



## PCI: Security Cover



### Definition

It is a multilayer cover placed over the connector to avoid and detect data contact access, especially from the top. It is connected to the PCB through 6 SMT terminals that are soldered at the same time as the other smart card terminals.

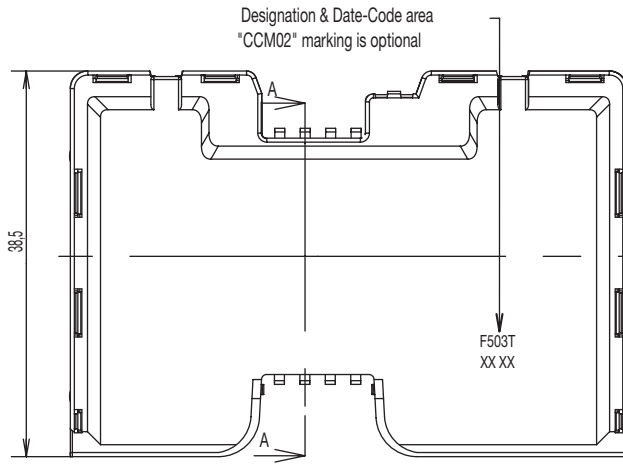
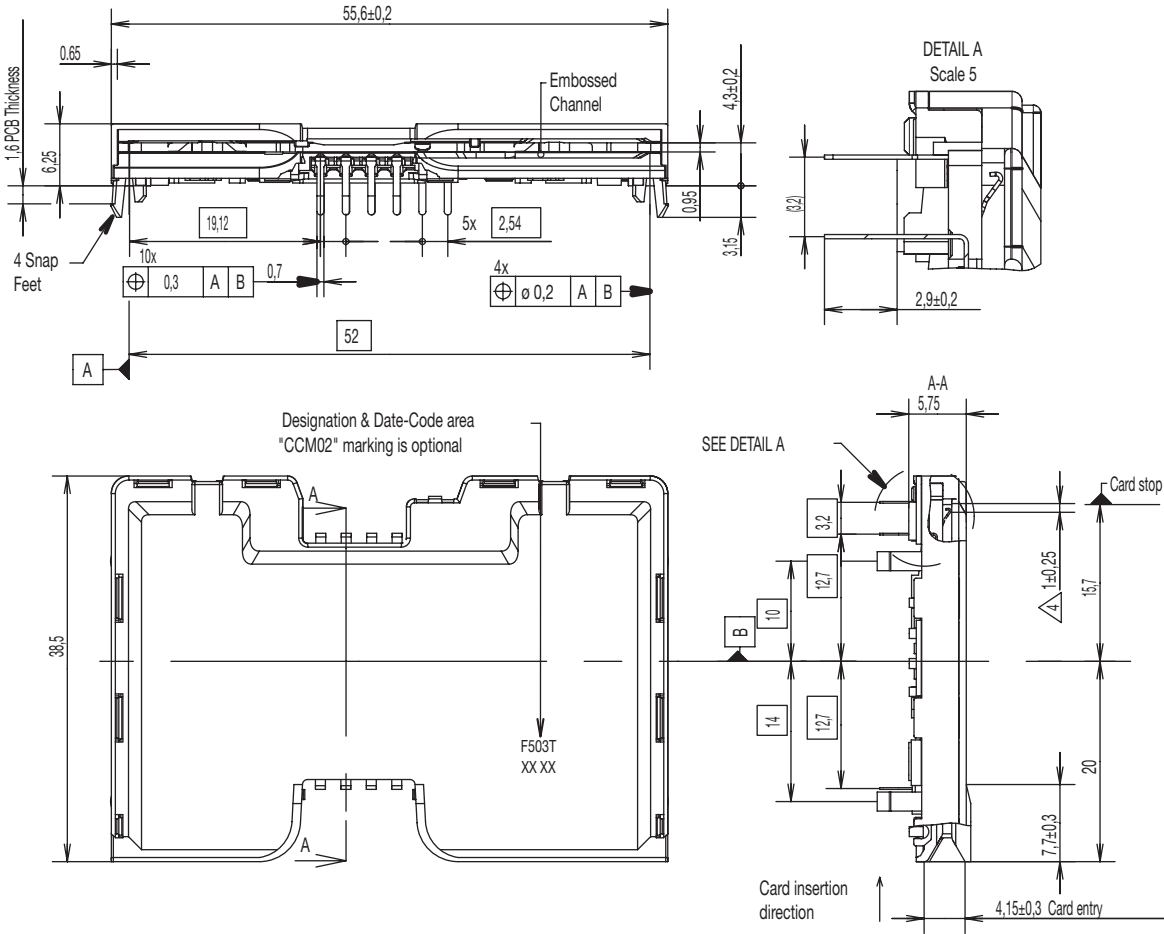
### Process

Please contact your Sales Representative for advice and recommendations about soldering this version.

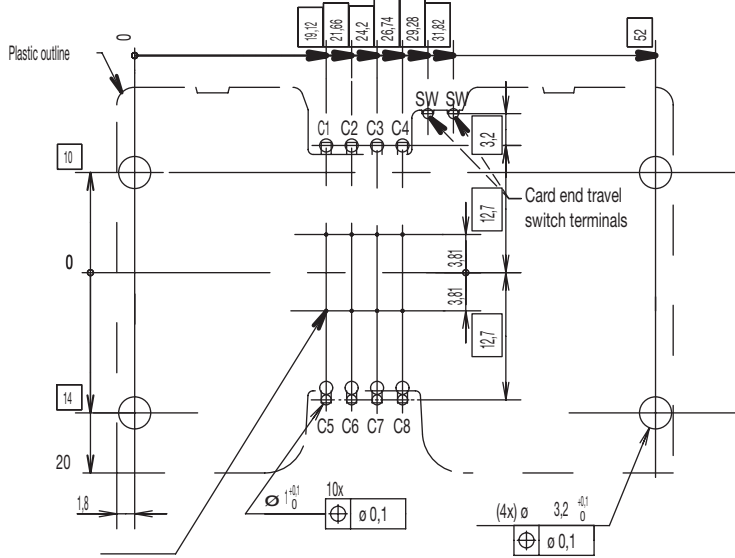
# CCM02 MK2 Series

## CCM02-2503 LFT

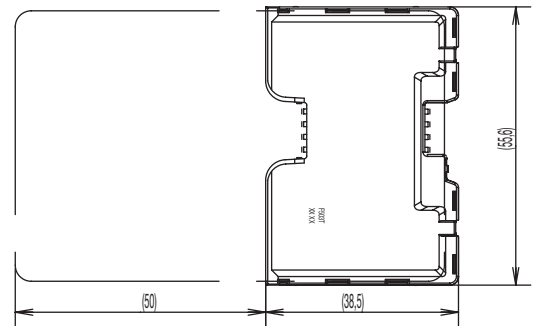
Full Size



RECOMMENDED PC BOARD LAYOUT  
(Component side)



Contact location according to  
ISO/IEC 7816-2



Dimensions are shown in mm  
Specifications and dimensions subject to change

www.ckwitches.com

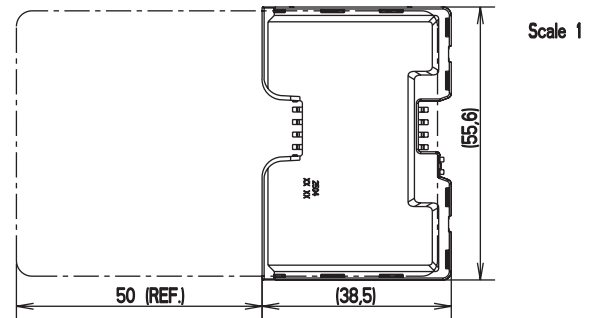
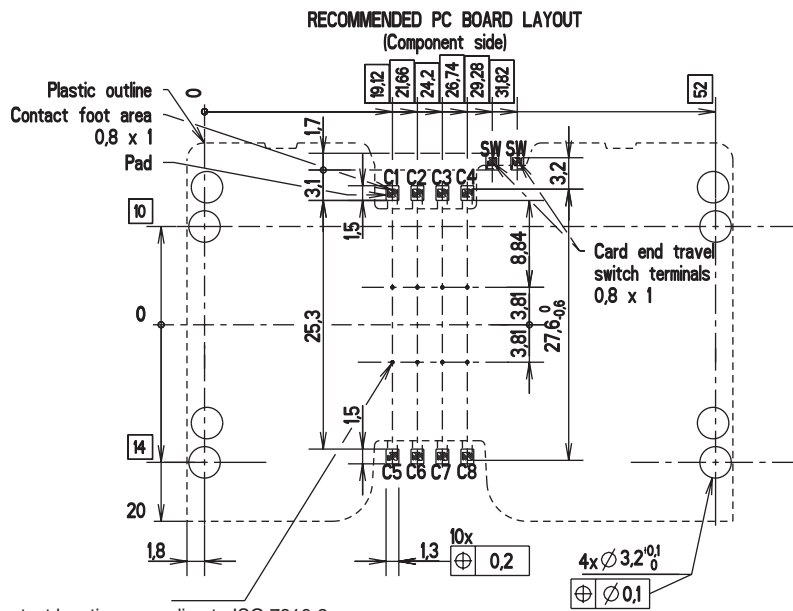
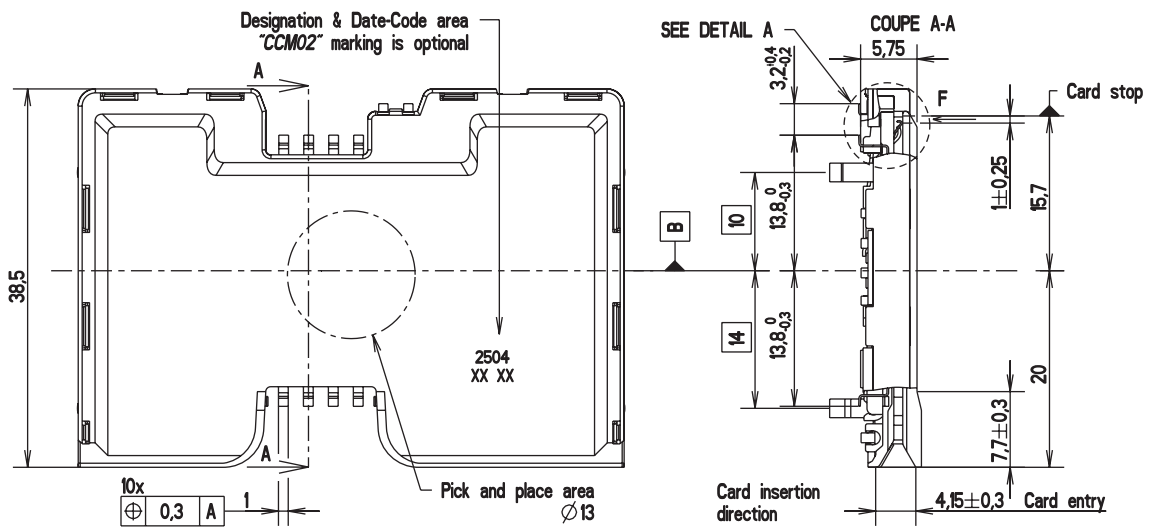
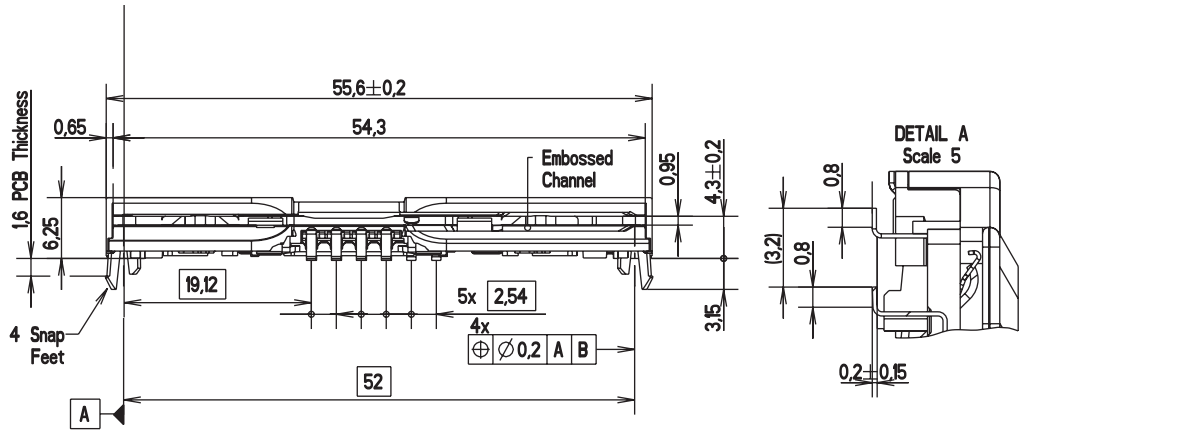


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# CCM02 MK2 Series

## CCM02-2504 LFT

Full Size



Contact location according to ISO 7816-2



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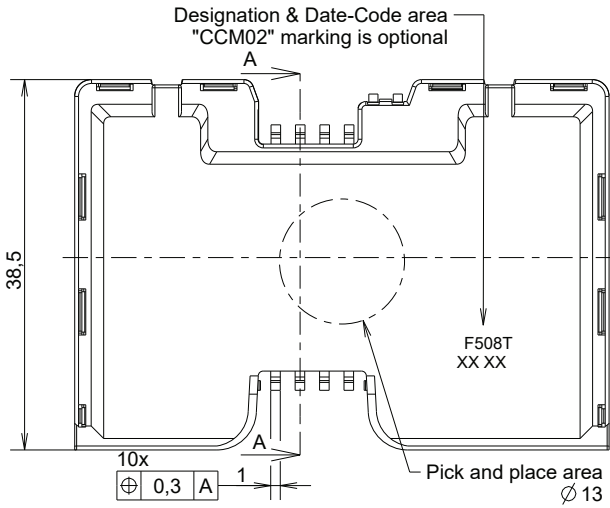
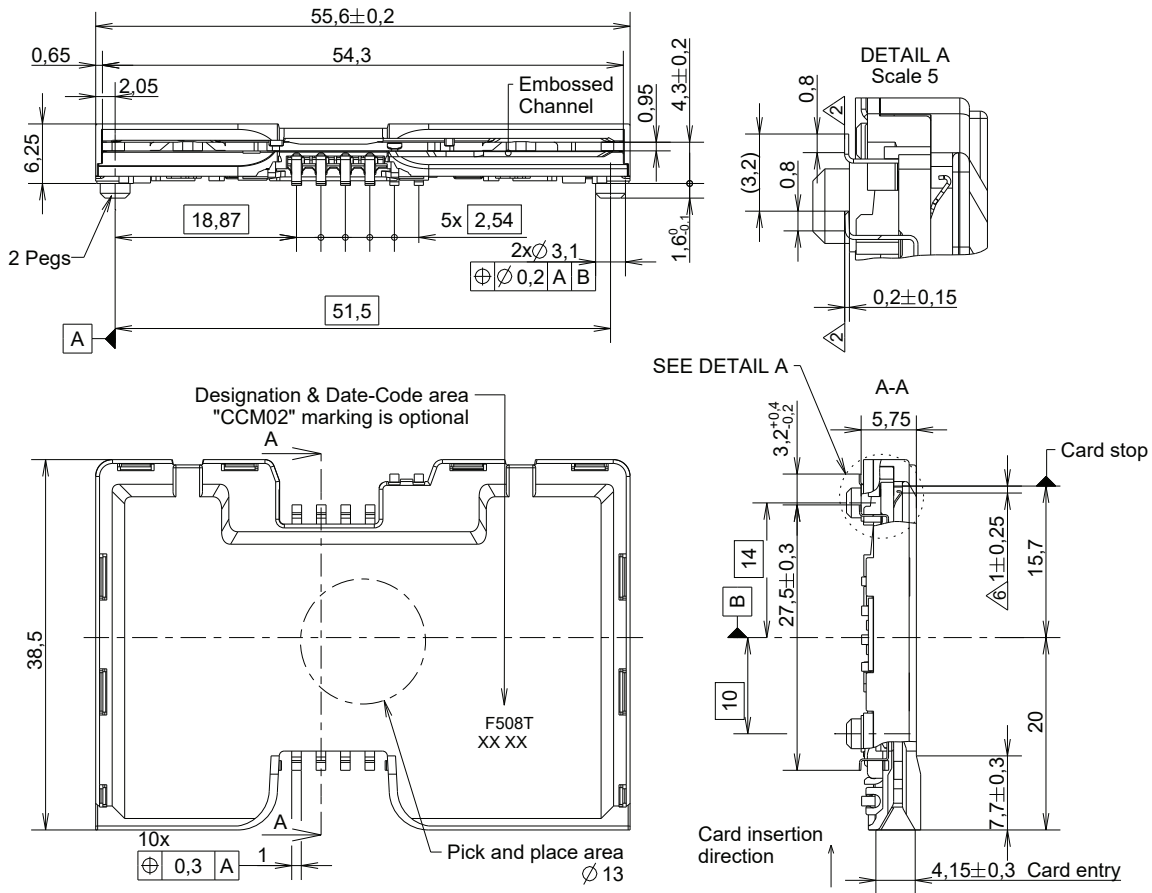
Dimensions are shown in mm  
Specifications and dimensions subject to change

www.ckwitches.com

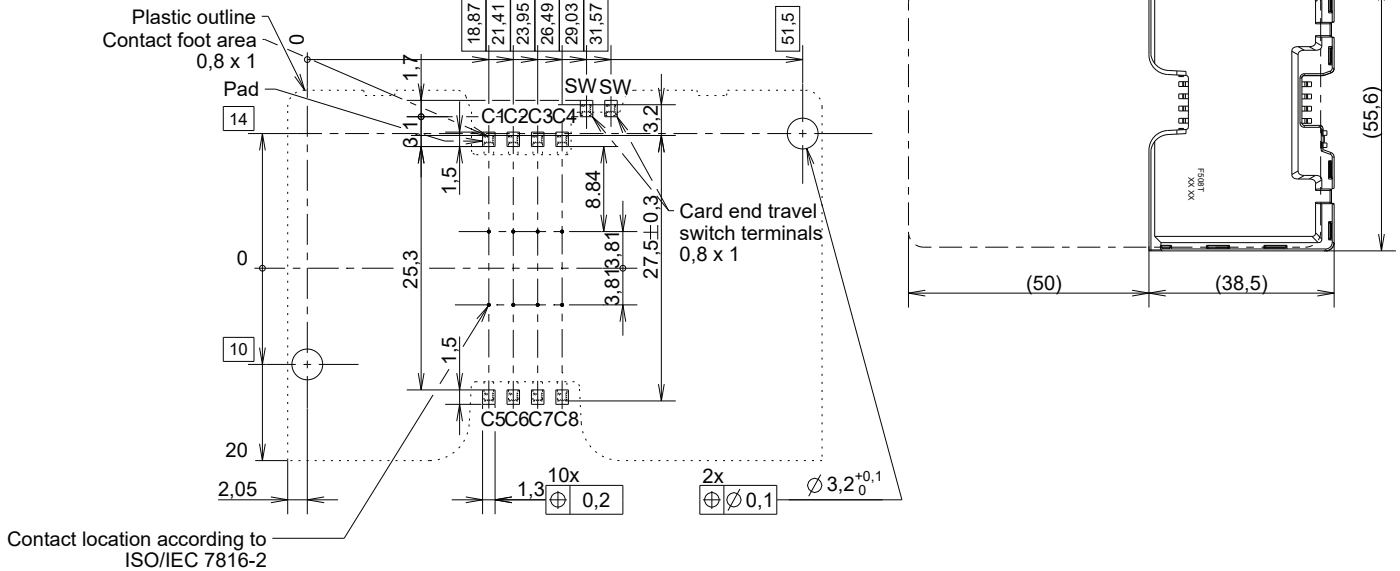
# CCM02 MK2 Series

CCM02-2508 LFT / CCM02 F508 LFT

Full Size



## RECOMMENDED PC BOARD LAYOUT (Component side)



Contact location according to ISO/IEC 7816-2



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Dimensions are shown in mm  
Specifications and dimensions subject to change

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