

# Advanced Flexible Mounter

## SM482

As a general component placer whose applicability to odd-shaped parts is reinforced based on the platform of the SM471, equipped with a head with one gantry and 6 spindles, the SM482 is applicable up to □55mm IC parts. It supports a polygon recognition algorithm to provide an optimum solution for the application to odd-shaped parts. In addition, it has improved actual productivity and placement quality by applying high speed and high precision electrically driven feeders. Furthermore, since it is designed to be compatible with SM series pneumatic feeders, it maximizes the customer's operational convenience.



- 28,000 CPH(Optimum)
- 1 Gantry x 6 Spindles/Head
- Applicable part : 0603 ~ □55mm(H 15mm)  
0402(Optional), ~ L75mm Connector
- Applicable PCB : 460(L) x 400(W)(Standard)  
Max. 740(L) x 460(W)(Option)
- High Speed, High Precision and Electrically Driven Feeder
  - Automatic pick-up position alignment function
  - Compatible with SM pneumatic feeders
- New Vacuum System and Optimized Pickup/ Placement Motion
- SMART Feeder
  - World's first Auto Splicing and Auto Loading

Advanced Flexible Mounter

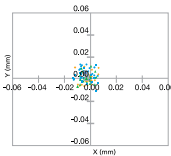
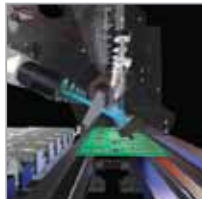
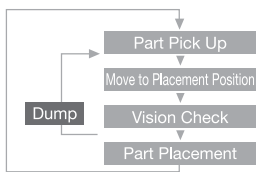
# SM482



**Realizes a High Speed Part Placement Speed of 28,000 CPH**

Realizes the highest placement speed among the same class chip placers by applying a flying head mechanism with 6 spindles as well as optimized pickup/placement motion

Since it allows part recognition without stopping after part pickup by applying its original On-the-Fly image recognition technology, the SM482 model maximizes the part placement speed by minimizing the time to move between the pickup position and placement position and by reducing the recognition time to almost zero.



Absolute Accuracy of ±50µm(Cpk 1)

## Placement accuracy correction system

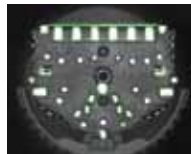
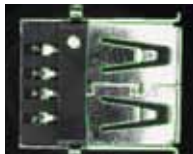
Chip ±50µm(Cpk ≥1.0)

The newly upgraded placement accuracy calibration system automatically checks and corrects the pickup point offset, head offset, C/V offset, etc. to allow reliable part placement.

## Reinforced Applicability to Parts and PCBs

- Applicable to 0603~ □ 55mm(H 15mm), ~L75mm Connector, and BGA/CSP parts by default(0402 Option)
- Applicable to Max. 740(L) x 460(W) PCBs for long boards applied to LEDs and displays
- Polygon recognition function

The polygon recognition function extracts the shape of a part to recognize the entire part shape. Therefore, it provides the optimized solution to irregular and odd-shaped parts.



## Applies a New Vacuum System

- Minimized delay of part placement due to optimization of pneumatic path
- Realizes stabilized part pickup and minimized air consumption by applying a vacuum pump

※ Air consumption is less than 50Nl/min when using a vacuum pump.

**Electrically Driven High Speed and High Precision Feeder**

## Electrically driven SM feeder

- Allows integrated use of 0603/2P/4P
- Equipped with a function to automatically align the pickup position between feeders to improve the simultaneous pickup rate.
- Able to set various part supply speeds to improve the stability of part supply.
- Automatic feeding pitch recognition function

## SM smart feeder

- The world's first feeder equipped with Auto Splicing and Auto Loading functions
  - Maximizes work convenience and actual productivity by automating the splicing process for part reel replacement normally performed by hand.
- Applicable to reels with a small quantity of parts



Present Reel  
New Reel

## Specifications

Model		SM482	
Alignment		Flying Vision + Stage Vision	
Number of Spindles		6 Spindles x 1 Gantry	
Placement Speed		28,000 CPH(Optimum)	
Placement Accuracy	Chip/QFP		±50µm@µ+3σ/Chip, ±30µm@µ+3σ/QFP (Based on the standard chips)
	Flying Vision	FOV 16 (Option)	0402 ~ □ 14mm IC, Connector(Lead Pitch 0.4mm) * BGA, CSP(Ball Pitch 0.65mm)
FOV 25 (Standard)		0603 ~ □ 22mm IC, Connector(Lead Pitch 0.5mm) ~ □ 17mm BGA, CSP(Ball Pitch 0.75mm)	
Component Range	Stage Vision	FOV 35 (Option)	~ □ 32mm IC, Connector(Lead Pitch 0.3mm) * BGA, CSP(Ball Pitch 0.5mm) ~ □ 55mm(MFOV)
		FOV 45 (Standard)	~ □ 42mm IC, Connector(Lead Pitch 0.4mm) * BGA, CSP(Ball Pitch 1.0mm) ~ □ 55mm(MFOV), ~ □ 75mm Connector
Max. Height		15mm	
Board Dimension (mm)	Minimum	50(L) x 40(W)	
	Maximum	460(L) x 400(W)	510(L) x 460(W)(Option)
	PCB Thickness	610(L) x 510(W)(Option) 740(L) x 460(W)(Option)	
Feeder Capacity		120ea / 112ea(Docking Cart)	
Utility	Power	AC 200 / 208 / 220 / 240 / 380 / 415 V (50/60Hz, 3Phase) Max. 4.7kVA	
	Air Consumption	0.5 ~ 0.7MPa(5 ~ 7kgf/cm <sup>2</sup> ) 180Nl/min, 50Nl/min(Vacuum Pump)	
Mass		Approx. 1,600kg	
External Dimension(mm)		1,650(L) x 1,680(D) x 1,530(H)	



SAMSUNG TECHWIN

### MMS Division SMT Overseas Business Dept.

Main Office

Samsungtechwin R&D Center, 701, Sampyeong-dong, Bundang-gu, Sungnam-Si, Gyeonggi-Do, 463-400, Korea

• Tel : +82-70-7147-5459, 6309 Fax : +82-31-8018-3723

• http : // www.samsung-smc.com

• The dimensions and product specifications contained in this catalog may be changed for the quality improvement without prior notice.