STF
Surftape Feeder
for 8, 12 and 16 mm Surftapes

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Easy handling of dies

For handling of dies in a standard-pick & place system the surftape feeder is a cost-effective solution and easy to handle.

Dies are dispensed with the active side facing up. A push-up tool in the surface feeder lifts the dies from the sticky tape rails for transfer to the pick head of the assembly placement machine.

The surftape feeder requires space of only 30 mm in the pick & place system. It is especially beneficial when many different dies must be applied on a PC Board.

Surftape Feeder with Panasonic Interface

Specifications of the Surf Tape Feeder STF	
Compatible with pick and place systems	Siplace (X series with ASM adaptor) and Panasonic NPM, further systems on request
Tape widths:	8 / 12 / 16mm surftape
Recommended tape sizes / component:	8 mm surftape: BE 1 x 1 mm - 2,3 x 2,3 mm, 12 mm surftape: BE 2,3 x 2,3 mm - 5 x 5 mm, 16 mm surftape: BE 3,8 x 3,8 mm - 9,5 x 9,5 mm
Placement accuracy of the bare dies on the surf tape:	Bare DIE size up to 2,3 x 2,3 mm: +/- 100 µm, 6 ó Bare DIE size more than 2,3 x 2,3 mm: +/- 200 µm, 6 ó (in relation to the center of the pocket)
Required distance of corners bare die – tape pocket:	Minimum 0,4 mm
Poke up needle:	Single or triple needle, depending on size of die
Tape material:	Surftape metrisch
Tape standard:	IEC 286-3, DIN-IEC-286, EIA 481 und JIS C 0806
Reel diameter:	7" up to 15"
Required feeder space for SST	1 track on the component table

Surftape Material

Surftape® is a unique form of punched carrier tape, ideal for bare die or small devices where protection and placement are critical. Components are placed on a wafer film adhesive backing within a compartment boundary.

The devices are held securely in place, preventing any movement or possible damage. When devices are picked from Surftape they are in the exact same location they were placed, simplifying high precision pick and place.

The distance between the parallel adhesive stripes depends on the component and enables lifting of the component with a needle from the bottom side. This distance has an influence also in the adhesive force of the components in the tape (less adhesive area=less adhesive force).

Unlike conventional embossed tape, the compartment does not have to be sized to the component – eliminating the need for custom carrier tooling. Traditional cover tape is also not required. Both elements reduce inventory management costs.

Surftape Advantages:

- Ideal for bare die, chip scale packages, MEMs, LEDs, and micro thin components.
- Wafer film base secures the devices in the exact position they are placed, no theta correction is required.
- Die are held safely in place - preventing corners, edges and surfaces from contacting the packing material.
- Simplifies use - eliminating the need for cover tape.
- One size of Surftape accommodates a multitude of component sizes.
- No tooling cost, no tooling lead time, or large minimum order requirements
- Easy application with Surftape Feeder

Covered by many industry standards for semiconductor packaging:

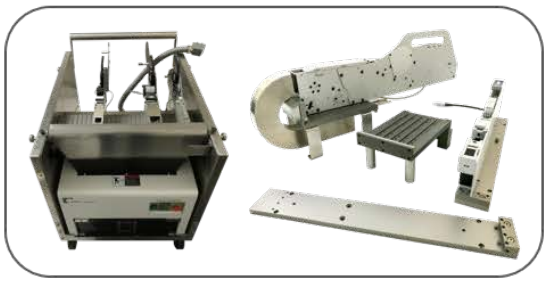
EIA 747 (Surftape), EIA 481, IEC 60286-3, JIS C 0806

Base part number	Width (mm)	Pitch (mm)	Max. Die size (mm)	Tape image
ST84	8	4	2.7 x 2.7	
ST124	12	4	2.0 x 4.4	
ST128	12	8	5.5 x 5.5	
ST1612	16	12	9.0 x 9.0	

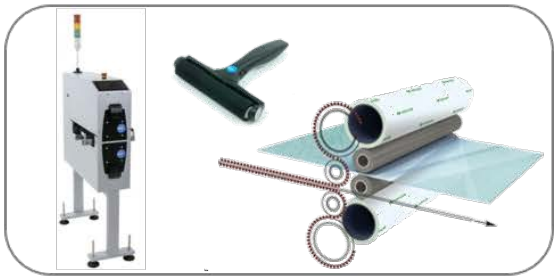
Our Product Portfolio

Feeding Technology

Label Feeder, Labels and Marking Solutions

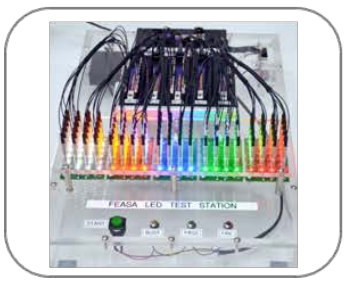


Special Applications



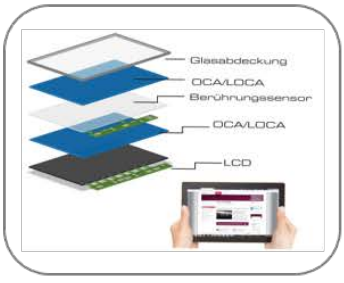
Bare Board Cleaning

In-System Programming

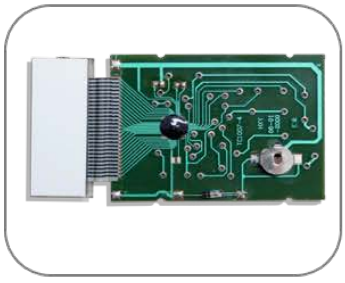


LED Analysis

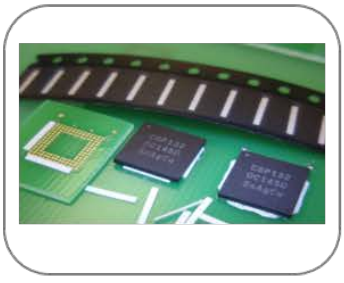
Reflow Inline Camera



Optical Bonding



Thermal Bonding



Place-N-Bond

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