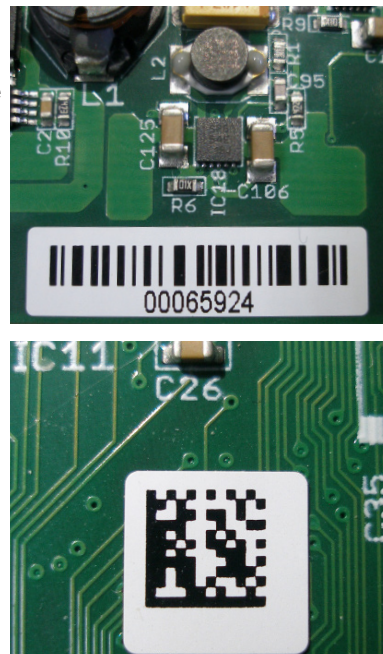# LABELING OF ELECTRONIC MODULES. MATERIALS

TASK

Ensure production control of boards and electronic modules by giving the product an individual number registered in the production control system. The product must be guaranteed and error-free to be identified before and after soldering, withstand cleaning with solvents.

THE SOLUTION

• The individual product number in the form of barcodes (Code128 or Code39) or two-dimensional codes (2D codes, for example Datamatrix) is printed on the label for reading and identification in the production management system;
• the label is affixed at the beginning of the technological process and identifies the product at all stages. During each technological operation, the product number is read and recorded together with the control parameters of the completed operation in the production management system.

LABELING REQUIREMENTS

• minimum label size;
• high temperature resistance;
• resistance to cleaning solvents;
• reliable adhesion of the label and the surface;
• compliance of materials with industry requirements (Pb Free, ANSI, RoHS, Halogen Free, UL).

UAB "TML-LT" manufactures labels in Lithuania from high-quality 3M, Polyonics, Flexcon materials, so we can ensure prompt delivery, optimal prices and constant quality control.

MATERIAL SELECTION

• polyimide labels are resistant to short-term heating up to 300-350°C;
• labels made of chemical-resistant polyester are resistant to short-term heating up to 200-300oC; complete print resistance to cleaning, requiring no additional thermal fixing;
• labels with an antistatic effect prevent the accumulation of static charge when removing the labels from the protective base;
• provide only standard materials for the production of labels. Labels can also be made of colored polyimide, labels with an easily removable adhesive layer;
• the most popular standard ink ribbons for printing are presented. It is possible to supply halogen-free coloring strips;
• resistance to cleaners, especially before oven processing, must be additionally tested;
• samples for testing (labels, coloring strips, labels with printing) are provided free of charge.

Code	Main characteristics	Max. temp.	Resistance to cleaning		ANSI	China & EU RoHS	Halogen Free	UL
			up to	after				
2211	Polyester 50mik	+250°C, 60 s	+	+			+	+
3478	Polyester 50mik	+250°C, 60 s	+	+				+
5185	Polyimide 25mik	+325°C, 90 s		+		+	+	+
5395	Polyimide 50mik	+325°C, 90 s		+		+	+	+
5187	Polyimide 25mik, antistatic	+325°C, 90 s		+	+	+	+	+
5237	Polyimide 50mik	+300°C, 90 s	+	+		+	+	+
5287	Polyimide 50mik, antistatic	+325°C, 90 s		+	+	+	+	+
B110CR	Ribbon, black	for 3478, 5XXX				+		
B110CU	Ribbon, black	for 2211				+		

* it is recommended to carry out additional tests under your production conditions to confirm the main parameters

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EQUIPMENT FOR PRINTING, APPLICATORS, LABEL DISPENSERS

Printer cab A4+M 300dpi

• Alignment of consumables rolls from the center of the thermal print head guarantees stable fixation of narrow label rolls;
• print compact labels from 5×5 mm in size;
• print mode for maximum resistance to particularly aggressive solvents;
• integration into automated production systems;
• the ability to work offline (software included);
• large color TouchScreen display with an intuitive Russified menu;
• can be equipped with a verifier to check the readability of barcodes.

Printer-applicator cab Hermes+

• industrial printer for printing, peeling and automatic labeling;
• resolution up to 600 dpi for printing two-dimensional codes on small labels;
• printing and application of labels from 5×5 mm in size;
• integration into automated production systems;
• the ability to work offline (software included);
• can be used both in automatic mode on the conveyor and in semi-automatic mode on the desktop.

Label peelers cab HS and cab VS

• devices for automatic peeling of finished labels;
• work in vertical (VS models) and horizontal (HS models) direction;
• minimum label width 8 mm, label height from 5 mm;
• models with display and counter of peeled labels, or without display and counter;
• models with a display have an interface for sending a third-party peel signal.

cab® GmbH (Germany) — a leading European manufacturer in the field of label printing and gluing equipment.

INFORMATION FOR ORDERS

Standart products *	Code	Package
Label 6.4x6.4mm, polyimide 5395	5395-66-2-10	10 000 pcs.
Label 6.4x6.4mm, polyimide 5395	5395-66-5-25	25 100 pcs.
Label 6.4x6.4mm, polyimide 5187	5187-66-2-10	10 000 pcs.
Label 8x4mm, polyimide 5395	5395-84-2-20	20 000 pcs.
Label 17x5mm, polyimide 5395	395-175-1-10	10 000 pcs.
Label 25.4x4.8mm, polyimide 5185	5395-255-1-10	10 000 pcs.
Label 25.4x4.8mm, polyimide 5187	5187-255-1-10	10 000 pcs.
Ribbon Res01 resin, 40mm*450m out	R303-40450	450 m
Label 17x5mm, polyimide 5237	5237-175-2-10	10 000 pcs.
Label 17x5mm, polyimide 5395	5395-175-2-10	10 000 pcs.
Label 17x5mm, polyimide 5187	5187-175-2-10	10 000 pcs.
Label 20x8mm, polyester 3478	3478-208-2-10	10 000 pcs.
Label 20x8mm, polyimide 5237	5237-208-2-10	10 000 pcs.
Label 20x8mm, polyimide 5395	5395-208-2-10	10 000 pcs.
Ribbon Res01 resin, 60mm*450m out	R303-60450	450 m
Label 20x8mm, polyester 2211	2211-208-2-10	10 000 pcs.
Ribbon B110CU resin, 60mm*450m out	RB187233	450 m

*Other equipment modifications and label sizes by special order..

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