



Press Release

Entry into digital PCB promising significant high precision

<http://www.we-online.com>

Publication free of charge
Sample copy requested

Image file:

20 December 2017 14:46:22
Page 1 of 5

Started early in 2017, the two PCB fabricators Würth Elektronik and FELA with their sites in the land Baden Wurtemberg, have been jointly researching on PCB technology digitization. Prototype results in July were encouraging already – in October both partners dispatched first serial orders of their respective pilot projects.

The s.mask technology pushed by FELA and Würth pursues an approach of coating a defined functional surface by 3- D print, independent of varnish and machine fleet. This is - from both companies' perspective – the best starting point for gradually digitizing PCB production and its inherent processes.

Initial material tests and examination results prove a tremendously improved **accuracy** and various options for an application- specific mask definition. Both offset and basic tolerance ranges can be significantly reduced that way.

Especially the individual surface design allows consideration of customer demands and special requirements, e.g. on dielectric strength values. S.mask as the first and sole technology in the PCB sector allows for direct coating of even more than just one layer of defined and precisely designed dielectric.



Press Release

<http://www.we-online.com>

Publication free of charge
Sample copy requested

Image file:

20 December 2017 14:46:22
Page 2 of 5

First trial series on soldering processes brought another outstanding **performance** to light: Notable improvement could be achieved for most of soldering and assembly issues previously known. Should these observations be confirmed during the test runs envisaged for early 2018, they would yield immense benefits. Both partners are expecting concrete statements for mid of 2018 already.

Norbert Krütt, managing director of FELA in Villingen-Schwenningen, is highly satisfied with the outcomes achieved so far: „The digitization of PCB technology represents a real quantum leap under technological aspects. Functional coatings respectively dielectric are no more generously dispersed like with a watering can but rather utilized in a targeted manner for realizing benefits in downstream processes at both stages, within the PCB production and those at our customers' sites. “

Beside the advantages in precision and performance, first pilot projects also show an upgrade of the PCB **protection**, turning out well through gentle application of the functional coating as well as reduced quantity and kind of the chemicals deployed.

The cooperation is conducted at all levels, from top management via R&D up to shared communication. Andreas Gimmer, managing director of Würth Elektronik CBT in Schopfheim, says: „Since the time we started our

Press Release



cooperative partnership, it has been seen that the way our companies are working together provides multifarious synergies. We expect economic success for us, but also find that common research and development is simply pleasure. “

<http://www.we-online.com>

Publication free of charge
Sample copy requested

Image file:

20 December 2017 14:46:22
Page 3 of 5

Photo: Precisely designed dielectric. (Photo: FELA)

About Würth Elektronik Circuit Board Technology (CBT):

Würth Elektronik Circuit Board Technology was founded in 1971 and has established itself as one of the leading PCB manufacturers in Europe. Developers are able get standard circuit boards, new and innovative technologies and even complete system solutions all from one source. Here at Würth Elektronik, we cover the entire product life cycle, from the initial idea for a design, for example during early R&D projects, to the production of prototypes on the online shop WEdirekt and finally, manufacturing of medium and large volumes in Germany or Asia. Knowledgeable specialists are not just located at our German plants. Internationalization is an important strategic aspect for Würth Elektronik. We have numerous sales teams set up across many European countries.

Every day more than 120 new PCB designs enter our production. We have over 4,000 customers, ranging from large corporations to one-man designers. In addition to the personal care provided through our dense network of over 100 internal and external sales people, customers also



Press Release

have the option to purchase printed circuit boards online through the easy to use online shop, WEdirekt.

For more information, visit www.we-online.com/pcb

Visit us also here:

www.we-online.com/youtube

www.we-online.com/twitter

www.we-online.de/facebook

<http://www.we-online.com>

*Publication free of charge
Sample copy requested*

Image file:

*20 December 2017 14:46:22
Page 4 of 5*

About FELA GmbH

FELA is one of the five largest circuit board manufacturers in Germany and has made the leap from simple contract manufacturer to innovative system provider. "Help us shape the future!" - with this motto, FELA GmbH is a fixture on today's market.

FELA, a private, independent medium-sized enterprise based in the southern Black Forest with a 165-strong workforce, generated sales of €23.6m in 2016. The company has its headquarters in Villingen-Schwenningen and an additional distribution centre in Solingen.

As well as manufacturing and selling FR4-based circuit boards, other mainstays of the company's activities include manufacturing capacitive glass input systems with the brand name FELAM GLASLINE and, as a technological leader, FELAM THERMOLINE technology, IMS circuit boards and systems for aluminium or copper-based power LED applications.

Press Release



FELA GmbH

Sturmbühlstraße 180 - 184

D-78054 Villingen-Schwenningen

www.fela.de

<http://www.we-online.com>

Publication free of charge
Sample copy requested

Image file:

20 December 2017 14:46:22
Page 5 of 5