

All the Trade Terms & Conditions are the integral part of DGTronik' offers.

Documentation required for PCBA			
Type of document	required	advisable	Remarks:
documentation should include explicit, unique name of product, used in all documents (DGTronik and Receiver); offers, orders, transport documents, invoices, etc.	✓		
assembly scheme with designation of PTH elements	✓		it can be silkacreen layer in files *.gbr or files *.pdf
assembly scheme with values of PTH elements		✓	
assembly scheme with designation of SMD elements	✓		it can be silkacreen layer in files *.gbr or files *.pdf
assembly scheme with values of SMD elements		✓	
*.gbr files	✓		Gerber format RS274X, if there is a panel then panelization file too
PCB specification , (material, thickness, finish...)	✓		
BOM list (name, sign, value, quantity, casing, type of assembly: SMD or PTH, placing TOP or BOTTOM	✓		the best in Excel format *.xls, each sign in separate column
mechanical assembly drawings (if such assembly is required)	✓		
files: pick&place for TOP and BOT	✓		<ul style="list-style-type: none"> <li>- coordinates in [mm]</li> <li>- coordinates of middle of components</li> <li>- coordinates of fiducials</li> <li>- the zero point in left-bottom corner</li> <li>a) in case of single board:                             <ul style="list-style-type: none"> <li>- the zero point in left-bottom corner</li> </ul> </li> <li>b) in case of panelised board:                             <ul style="list-style-type: none"> <li>- the zero point in left-bottom corner</li> <li>- pick&amp;place only for one board, located closest to left-bottom corner of the panel</li> <li>- offsets between boards</li> </ul> </li> </ul>
list of not assembled components		✓	
test instruction if applicable	✓		
description of package and transport	✓		
documentation in English	✓		
any other, specific requirements for the product	✓		
list of components which are not allowed to assembly in standard production processes, for instance components which need different temperature of soldering in reflow oven or on soldering wave, DGTronik doesn't check it until is warned by a Receiver.			

Documentation required for PCBA continued			
Type of document	required	advisable	Remarks:
<b>Engineering Change Note (ECN)</b> - if changes are required in the previously provided documentation (DGTronik's format available for reference).	✓		Minimum content of information in ECN: ➤ Product: ➤ The change is valid from: date / PO # / production order no. etc. ➤ Is the change permanent?: YES / NO ➤ Changes made: was / should be ➤ Refers to drawings: Ref. no. / name ➤ Change introduced by: ➤ Date:

### Production set-up price

It is non-recurring cost and is charged only at the first production batch. The price is valid under condition that production documentation was provided according to the requirements of DGTronik (see table above). Making changes to PCB or BOM in next batches means change of the product version and will cause new start-up fee.

### Incomplete documentation, additional changes after the PO is placed

DGTronik in its offers informs about completeness of received documentation. Despite of this some pieces of information cannot be figured out until production starts. Missing or incorrect information in production documentation which couldn't be identified before starting the production as well as making extra changes into the project by the Customer after placing an order, will cause necessity of correcting the original documentation. In such situation DGTronik may charge the customer 5% of order value and not less than 130 EUR per order. Also the lead time may change but not less than one week. DGTronik uses that rule in a very reasonable way.

**We ask you to check carefully beforehand if provided documentation is correct and corresponding strictly with industry standards described in the table above (see *Required Documentation*).**

### Rights to change prices of materials on every stage of order

Some materials are being bought in USD. As the rate of EUR/USD changes dramatically from time to time, DGTronik reserves the right to change given prices of materials on every stage of order if change of EUR/USD rate will be higher than 2% comparing to the order placement date. Rates used for calculations are presented in DGTronik's offers. On the Customer's request DGTronik will inform which components and what amount is affected by the EUR/USD rate change risk.

### The right to change prices or lead times of materials before placing the PO by the Customer.

DGTronik reserves the right to change the lead time and/or prices of materials caused by objective reasons independent of it e.g. materials sold out of distributors stock in period between the offer date and placing an order, change of lead times by materials producers, distributors or because of acts of God, etc.

### Requirements concerning materials delivered by the Customer.

To enable our company assemble in a professional way and on time, materials have to be delivered according to requirements as below:

properly marked, especially for identifying that they are made in Pb or RoHS technology	SMD - not in reels cuttings and bent reels
SMD - on reels, trays, strips etc.	SMD - not loose
sufficient quantity required for production including SMD loss (see the rule below)	SMD - reels with piece of starting tapes, if not see the rule below
components sensitive to humidity - packed hermetically	each delivery has to be accompanied by attached delivery list which will include: name/ symbols of component, value, quantity, package, type of component: SMT, TH, mechanical, eventual equivalents, Customer's internal code.

Cheap SMD components the Customer will deliver in a little bigger quantity as follows:

- on reels with starting tape: 1,5% (not less than 10 pcs.)
- without the starting tape: 1,5% (not less than 50 pcs.)
- SMD components like BGA etc. with area bigger than 1 cm<sup>2</sup> (view from top without area of pins): 0,5% (minimal qty is 1 pc.)

Delivery of smaller quantities than mentioned above may lead to assemblage of incomplete quantity of boards, or boards with missing components in return. Such order is considered to be performed correctly and possible shorts can't be a subject of claims.

**Deviation from the above requirements is possible ONLY before production started and has to be done in writing (e-mail).**

DGTronik reserves the right to debit the Customer with some extra costs arisen during production set-up or/and production resulting from incompliance with above requirements, according to the scheme below:

For delivery of components incompatible with *Requirements concerning materials delivered by the Customer*, without prior Customer's notification made before delivery of the material to DGTronik, DGTronik can charge the Customer a 5% of the order value for one type of such component.

When preparatory analysis will show more than 5% of incompatible components, DGTronik can stop proceeding with the order and send back the material to the Customer on its cost. At the same time the Customer will be debit with costs of production set-up, stencils and/or other materials necessary to start the production - resulting from the offer or other settlements between the Customer and DGTronik as well as with costs of other works resulting from standard actions taken for realisation of the order after its placing.

**Deviation from the above requirements is possible ONLY before production started and has to be done in writing (e-mail).**

Despite DGTronik makes an incoming goods inspection, it doesn't have an obligation to check the quality and quantity of Customer's materials before start of production in case of lack of any visible signs of parcel damage. DGTronik is not responsible for any consequences including delay of lead time and possible Customer's loss resulting from delivery of components and technological documentation in bad condition or/and incompatible with requirements of DGTronik described in the table *Required Documentation* and the *Requirements concerning materials delivered by the Customer*.

If the Customer is not able to deliver materials in good quality and quantity or is unsure of it then to avoid any risk of the above rules, we suggest outsourcing all materials by DGTronik.

### **Delivery of non-RoHS TH (through hole) components or PCB by the Customer for RoHS process.**

Delivery of non-RoHS materials by the Customer, in case of placing an order for RoHS assembly, can cause contamination of RoHS tin in the wave soldering machine during soldering process.

In this situation costs of tin batch exchange bears the Customer and it is 13000 EUR.

Please keep attention that all components have clear sign that it's Pb-free/RoHS or Pb material.

If you are not sure if provided materials are RoHS or not, declare this before placing the order to avoid the responsibility.

### **Guarantee/ Complaints**

DGTronik guarantee that during 12 months after manufacturing the electronics will be free of any failures. Quality assurance covers as follows:

- a. Solder joints
- b. Materials in case of purchase done by DGTronik
- c. Functionality - if IC or functionally tested by DGTronik

All articles assembled in DGTronik are traceable.

Complaint actions can be applied only to goods formerly performed by DGTronik according to Customer's production order or agreement.

Every product is being labelled with a PO number, year and serial number but in some special cases DGTronik can resign from the serial number (for instance for very small boards).

Products without any assembly defects may not operate well, but products with defects may function.

Both parties should remember that:

Both, DGTronik and a Customer are partners with duties and rights.

Complaint has to meet the following conditions to be considered by DGTronik.

For every complained product there should be given an exact information about serial numbers and description of damage.

In case of big production batch and mass appearance of defects it is permissible not to inform about description of every product, but these pieces of information should be given:

- a) PO number and year
- b) General description of defects
- c) Number of products with found defects

General rule is taking back goods by DGTronik. Only then deep check is possible as well as avoiding similar problems in the future.

In case when taking back goods by DGTronik is groundless (insignificant defect, big costs of transportation, products can be easily repaired by the Customer, etc.) and defects are well documented it is possible to not take back complained products by DGTronik. In this case all aspects of such situation related to costs

covering by DGTronik or other compensation and other actions have to be cleared up and documented in writing in short time so that the complaint is considered by both parties as completely solved and closed.

Any actions taken by the Customer such as attempts of repairs with ignoring the complaint rules lead to cancellation of responsibility of DGTronik for any defects.

Pictures of complained products are helpful but sometimes not enough for determination of defect and its reason.

Groundless complaint can lead to invoicing Customer with costs of unnecessary check.

Feel free to ask when you have any doubts regarding the trade terms and conditions by sending e-mail to [dgtronik \(at\) dgtronik.com.pl](mailto:dgtronik@dgtronik.com.pl).