

19-Jul-2018

To: TTM PCB Customers

RE: EU REACH impact on unpopulated printed circuit boards (PCBs) manufactured by TTM Technologies, Inc.¹ (TTM)

TTM is a non-EU producer of articles. Therefore registration of substances used to manufacture TTM products is not required under the REACH regulation. TTM products do not have any intentional release of chemical substances during normal use.

This letter affirms that unpopulated printed circuit boards manufactured by TTM:

1. Contain no substances restricted under Annex XVII of REACH last updated by ECHA on Jun 29, 2018. (<https://echa.europa.eu/substances-restricted-under-reach>).
2. Meet the REACH Article 3.3 definition of “article, but may also be “complex objects”.
3. Do not contain any reportable “REACH Candidate List of Substances of Very High Concern (SVHC) for Authorisation (<https://echa.europa.eu/candidate-list-table>) last updated by the European Chemicals Agency (ECHA) on Jun 27, 2018 (191 items) except as listed below :
 - a. Any unpopulated printed circuit board design may contain reportable lead (Pb) if the material specification provided to TTM by the customer calls for the addition of tin/lead solder.
 - b. Unpopulated Flex and/or flex/rigid circuit boards may also contain Hydrogenated Terphenyl, and/or N,N-dimethylacetamide (DMAc) depending upon the materials specified to be included in each design’s material specification provided to TTM by each customer.

This certification is based on chemical reviews of substances, selected supplier information, available analysis data, and anticipated usage of the products. This certification is believed by TTM to be accurate and correct as of the date of this letter. Should you have any questions on this certification, or related to custom products manufactured by TTM other than unpopulated printed circuit boards, please contact your TTM Sales representative.

Sincerely,



Stephen G. Edward, P.E.
Product Environmental Reporting Manager
Corporate Environmental, Health and Safety, TTM Technologies Inc.

¹Includes wholly owned subsidiaries of TTM including but not limited to those with current and former names such as *Advance Circuits, TTM Printed Circuits Group, Meadville Group, Oriental Printed Circuits, TTM Technologies North America, Inc., Viasystems Technologies Corp., L.L.C., Guangzhou Termbay Electronics Technologies Limited, Merix Printed Circuits Technology Limited, and Zhongshan Viasystems Printed Circuit Board Company Limited.*

2018年07月19日

致：迅达科技线路板客户

关于：欧盟化学品注册、评估、许可和限制(REACH)对迅达科技集团制造的未组装印刷电路板(PCBs)的影响

迅达科技是非欧盟条款制造商。因此，根据 REACH 法规，不需要注册用于制造迅达科技产品的物质。迅达科技产品在正常使用期间没有任何有意释放的化学物质。


这信件确认迅达科技集团(TTM)制造的未组装印刷电路板：

1. 不包含 ECHA 于 2018 年 6 月 29 日更新的 REACH 附件 XVII (<https://echa.europa.eu/substances-restricted-under-reach>) 限制的物质。
2. 符合 REACH 第 3.3 条内的“物品”定义，但也可能是“复杂物品”。
3. 不含任何可报告的 REACH 授权的候选名单高度关注物质(SVHC) (<https://echa.europa.eu/candidate-list-table>)，由欧洲化学品管理局(ECHA)于2018年06月27更新(191项)，除了下面列出的：
 - a. 如果客户提供给迅达科技的材料规格要求添加锡/铅焊料，任何未组装的印刷电路板设计都可能包含可报告的铅(Pb)。
 - b. 未组装的柔性和/或柔/刚性线路板也可含有氢化三联苯和/或 N, N-二甲基乙酰胺(DMAc)，这取决于每个客户提供给迅达科技的每个设计材料规范中指定的材料。

本认证基于对物质的化学综述、选定的供应商信息、可用的分析数据和产品的预期用途。迅达科技相信本认证截至本函日期都是准确和正确的。

如果您对此认证有任何疑问，或与迅达科技制造的定制产品(除了未组装的印刷电路板外)相关的问题，请联系您的迅达科技销售代表。

此致，



Stephen G. Edward, P.E.

产品环境统筹经理

集团环境、健康与安全，迅达科技

¹ 包括迅达科技的全资子公司，包括但不限于当前和以前名称的子公司如 **Advance Circuits**、**迅达科技印刷电路集团**、**美维集团**、**东方印刷线路**、**迅达科技北美股份有限公司**、**惠亚科技集团有限责任公司**、**广州添利电子科技有限公司**、**美锐电子科技有限公司**、**中山市惠亚线路版有限公司**。