

## 文件發行/變更通知 (DCN)

文件編號：NA	DCN 編號：NA	新編之版次：02
文件名稱：環保承諾 Environmental commitments		緊急：是 ( ) 否 ( V )
變更之原因：修訂	機密文件 ( ) 管制文件 ( V ) 非管制文件 ( )	
相關產品： <input checked="" type="checkbox"/> ALL <input type="checkbox"/> VCSEL <input type="checkbox"/> FP/IL/DFB <input type="checkbox"/> PIN/APD <input type="checkbox"/> AOC <input type="checkbox"/> TO <input type="checkbox"/> TOSA <input type="checkbox"/> OSA/BOSA <input type="checkbox"/> Transceiver		
<b>變更敘述：</b>  因應 WTO/TBT 於 2014 年 12 月 17 公佈 G/TBT/B/EU/256。為歐盟委員會正式通報未來 RoHS2.0 指令(2011/65/EU)將新增四項鄰苯二甲酸酯(DEHP, BBP, DBP, DIBP)到禁用物質清單中(2011/65/EU Annex II)。預計公告日期：2015 年 2~5 月；預計執行日期：2019 年 7 月 22 日  1 文件刪除： 1.1 3.1：RoHS2.0 六溴環十二烷 HBCDD  2 文件新增： 2.1 3.1：RoHS2.0 鄰苯二甲酸二異丁酯 DIBP  3 文件修改 3.1 原文：  2.4.1 請提供交予華星光通最終產品之，第三方公証單位之檢測報告，並遵守歐盟化學總署於 2014 年 06 月 16 日正式公告將新的 4 項高度關注物質納入歐盟化學總署公告的高度關注物質清單，截止目前共有 155 項物質。  Please provide Luxnet with the final product and a test report from a notary of a third party source which complies with the EU Chemicals Agency. As of June 16, 2014, the EU Chemicals Agency announced that 155 substances are currently restricted.  3.2 修改： 2.4.1 歐盟化學總署於 2014 年 12 月 17 日正式公告將新的 6 項高度關注物質納入歐盟化學總署公告的高度關注物質清單，截止目前共有 161 項物質。詳細高關注物質清單參見網址： <a href="http://echa.europa.eu">http://echa.europa.eu</a> The European Chemicals Agency (ECHA) announced on Dec 17, 2014 that all 6 substances previously proposed as Substances of Very High Concern (SVHC) have been added to the Candidate List. The Candidate List now contains 161 HCs. Detail of SVHCs information refer to web address at <a href="http://echa.europa.eu">http://echa.europa.eu</a> )		
制訂人：柯秀貞		生效日期(DCC 填寫)： <b>20150507</b>
簽核單位	<input checked="" type="checkbox"/> 晶粒研發部 <input checked="" type="checkbox"/> 元件封裝研發部 <input checked="" type="checkbox"/> 模組研發部	<input checked="" type="checkbox"/> 供應鏈管理部 <input checked="" type="checkbox"/> 零組件業務部 <input checked="" type="checkbox"/> 模組業務部 <input checked="" type="checkbox"/> 製造部  <input checked="" type="checkbox"/> 品保部 <input type="checkbox"/> 管理部 <input type="checkbox"/> 財務部 <input checked="" type="checkbox"/> 核准

# 華星光通科技股份有限公司

## 文件發行履歷表

文件類別	規範	名稱	環保承諾	編號	NA
版本	制訂日期	理由	制訂人	主管	備註
0	2014/05/26	新增	柯秀貞	陳建俐	
1	2014/10/30	修訂	柯秀貞	陳建俐	
2	2015/4/29	修訂	柯秀貞	戴廷安	

## 環保承諾 Environmental commitments

### 1 目的 Purpose :

- 1.1 華星光通已因應全球環保法令要求制定「QP2-QA24 產品限用物質管理規範」及「QP3-QA002 危害物質管制規範」，以規範華星光通生產之產品其有害物質之使用，及環保相關管控要求的符合性程度，並說明我們保護地球環境、減輕對生態系統衝擊之承諾。

In response to global environmental legal requirements, Luxnet has developed 「QP2-QA24 Restriction of Hazardous Substances Management Scope」 and 「QP3-QA002 HSF Control Specification」 in order to regulate the use of restricted materials during the production of Luxnet products, comply with any environmental regulations, and to reduce the impact on the ecosystem.

- 1.2 除了遵守現行之產品禁用與限用物質的要求之外，我們也持續關注國際間環境物質的動態，如美國挪威產品法規：禁止消費性產品中使用某些有害物質禁令（RoHS）；歐盟-化學物質註冊、評估、授權和管制（REACH）；歐盟電器及電子產品禁用指令（PFOS/PFOA）；國際電工委員會 IEC 規格規範（無鹵規範）；基於尊重國際人權之立場之（衝突礦產）等。

In addition to complying with the requirements of regulating the use of restricted substances, we are continually monitoring for any developments in the international environmental movement including: USA and Norway product regulations which prohibits the consumption of products that contain certain hazardous substances (RoHS); EU - Chemical substance registration, evaluation, authorization and control (REACH); EU directive to ban electrical and electronic products (PFOS / PFOA); International Electro-technical Commission (IEC) standard specification (halogen-free specification); based on respect for the stance on international human rights (conflict minerals) and so on.

- 1.3 如上所列地域性或國家法律法規等對某些有害物質進行限制或禁用等之要求，即使這些法律法規及指令、物質未被明確列入本文件中，秉持對環境保護之承諾，我們要求供應商必須於 2015 年 1 月前符合及遵守相關要求與規定，並善盡告知之責。

With regards to the impact on the environment, if there are regulations beyond the scope of the above, we expect our suppliers to uphold its commitment to environmental protection. We ask that suppliers must comply with the relevant requirements and regulations by January 2015, and to fulfill the duty to inform Luxnet of the status by then.

## 2 供應商要求及企業責任 Supplier Requirements and Corporate Responsibility :

### 2.1 RoHS(全系列產品 Full range of products) :

2.1.1 請提供交予華星光通最終產品其原材料之，第三方公証單位檢測報告，並遵守 RoHS 及 RoHS 2.0 (2011/65/EU)之限用指令。

Please provide Luxnet with the final product's raw material and a test report from a notary of a third party source to comply with RoHS and RoHS 2.0 (2011/65/EU) directives.

2.1.2 為確保各供應商之製程、包裝、搬運過程中產生，RoHS 限用之化學品，檢測報告效期為一年，以證明製程中，無限用化學品之污染。

In order to ensure that each supplier's manufacturing process, packaging, shipping and handling process do not produce RoHS restricted chemicals, test reports are valid for only one year.

2.1.3 企業責任 Corporate Responsibility :

2.1.3.1 RoHS 排外條款：歐盟即將於 2016 年 7 月 1 日解除 6(a), 6(b), 及 6(c)之排外條款，如貴司之「鉛」適用於以上三項條款，請確認於 2016 年 6 月 30 日後供貨予 Luxnet，必需符合 RoHS 規範。

RoHS exclusion clause: On July 1, 2016, the EU will lift the 6 (a), 6 (b), and 6 (c) exemption clause. If [Pb] is used by your company, then you must confirm that all deliveries to Luxnet by June 30, 2016 will be RoHS compliant.

### 2.2 PFOS/PFOA(Chip/Filter/亮面金屬 Shiny metal) :

2.2.1 請提供交予華星光通最終產品其原材料之，第三方公証單位檢測報告，並遵守符合歐盟電器及電子產品禁用全氟辛烷磺酸/全氟辛酸指令(2006/122/EC)，簡稱 PFOS/PFOA。

Please provide Luxnet with the final product's raw material and a test report from a notary of a third party source to show compliance of the PFOS/PFOA Directive (2006/122/EC).

- 2.2.2 為確保各供應商之製程、包裝、搬運過程中產生，PFOS/PFOA 限用之化學品，**檢測報告效期為一年**，以證明製程中，無限用化學品之污染。

To ensure that each supplier's manufacturing process, packaging, shipping and handling do not utilize restricted chemicals (PFOS/PFOA), **the test reports are valid for only one year.**

### 2.3 含鹵規範 Halogen Free (PCB/塑膠件 Plastic parts) :

- 2.3.1 請提供交予華星光通**最終產品其原材料之**，**第三方公証單位之檢測報告**，並遵守符合國際電工委員會 IEC 規格規範 IEC 61249-2-21 之含鹵規範。

Please provide Luxnet with the **final product's raw material** and a test report from a notary of a third party source which comply with the specifications in line with the International Electro-technical Commission IEC specification IEC 61249-2-21 for products contacting halogen.

### 2.4 REACH(全系列產品 Full range of products) :

- 2.4.1 歐盟化學總署於 **2014 年 12 月 17 日**正式公告將新的 **6 項**高度關注物質納入歐盟化學總署公告的高度關注物質清單，截止目前共有 **161 項**物質。詳細高關注度物質清單參見網址: <http://echa.europa.eu>

The European Chemicals Agency (ECHA) announced on **Dec 17, 2014** that all **6** substances previously proposed as Substances of Very High Concern (SVHC) have been added to the Candidate List. The Candidate List now contains **161** HCs. Detail of SVHCs information refer to web address at <http://echa.europa.eu> )

- 2.4.2 如出示檢測報告有實質之困難度，**可接受簽屬由 Luxnet 提供或貴司之「REACH 聲明書」**。

If there are difficulties in providing the test report, **it is acceptable to sign the Luxnet provided contract stating the absence of restricted substances or provide us with the 「REACH Compliance Declaration」**

2.4.3 MDS (Material Data Sheet )材料均質表：因應 REACH 之規範，Luxnet 需規範製程品的所有物質，故必須建立安全性評估和化學物質 CAS No.資訊登記；於零件承認時，需出示貴司之 MDS。

In response to REACH's specifications, Luxnet needs the supplier's to provide all chemicals that are utilized during manufacturing. The MDS provided must also include the CAS No. ; To acknowledge the parts, we require your company to provide us with the MDS.

2.4.4 企業責任：如貴司每年製造或輸入歐洲之「化學品」超過一噸以上，需於 2018/05/31 日前為該化學品進行註冊申報。

Corporate Responsibility: If your company manufactures or imports a total weight of over one ton on an annual basis to Europe 「chemicals」, then you are required to register on the website before 2018/05/31.

## 2.5 衝突礦產(MDS 含有鈷(Co)、錫(Sn)、鈀(Pd)、鉭(Ta)、鎢(W)、金(Au))

**Conflict Minerals:** (If your material datasheet includes Co、Sn、Pd、Ta、W、Au):

2.5.1 因應 2010 年 7 月美國總統歐巴馬簽署了第 4173 號法案(H.R. 4173)「華爾街改革與消費者保護法(Dodd-Frank Act)」，如有使用鈷(Co)、錫(Sn)、鈀(Pd)、鉭(Ta)、鎢(W)、金(Au)金屬之礦源需確認是否來自於剛果民主共和國；請簽屬由 Luxnet 提供或貴司之「衝突礦產聲明書」，並明列供貨予 Luxnet 六項礦源之進口來源國家資料。

In response to Bill H.R. 4173 Dodd-Franck Act signed by U.S. President Obama on July 2010, if the use of cobalt (Co), stannum (Sn), palladium (Pd), tantalum (Ta), wolfram (W) or gold (Au) metal mineral resources are present, then we need to confirm whether the source of the material is from the Democratic Republic of the Congo; Please sign the Luxnet provided agreement or provide your company's 「Conflict Minerals Compliance Declaration」 please notify Luxnet the country of origin of all six minerals.

### 3 各項法規指令 Regulatory Directive :

#### 3.1 RoHS :

RoHS Directive 2002/95/EC RoHS 限用指令 2002/95/EC :

1. Cadmium (Cd) <100ppm (鎘含量小於 100ppm).
2. Lead (Pb) <1000ppm (鉛含量小於 1000ppm).
3. Mercury (Hg) <1000ppm (汞含量小於 1000ppm).
4. Hexavalent Chromium (Cr(VI)) <1000ppm. (六價鉻含量小於 1000ppm).
5. polybrominated biphenyls (PBBs) <1000ppm (多溴聯苯含量小於 1000ppm).
6. polybrominated diphenyl ethers (PBDEs) <1000ppm (多溴聯苯醚含量小於 1000ppm).

RoHS2.0 Directive 2011/65/EU RHS2.0 限用指令 2011/65/EU :

1. Dis(2-ethylhexyl)phthalate (DEHP) <1000ppm (鄰苯二甲酸二(2-乙基己基)酯含量小於 1000ppm).
2. Butyl benzyl phthalate (BBP)<1000ppm (鄰苯二甲酸丁苯甲酯含量小於 1000ppm).
3. Dibutyl phthalate (DBP)<1000ppm(鄰苯二甲酸二丁酯量小於 1000ppm).
4. Di-isobutyl phthalate(DIBP)<1000ppm(鄰苯二甲酸二異丁酯量小於 1000ppm).

#### 3.2 PFOS/PFOA :

有害物質 PFOS/ PFOA 之允許含量佔產品比率如下:

The permissible maximum concentration values of hazardous substances present in electrical and electronic equipment, general requirements are as follows:

- Substance or constituent of preparations < 10ppm(PFOS/PFOA 物質或製劑組成成分中小於 10ppm)
- Semi-finished products & articles & parts < 1000ppm(PFOS/PFOA 半成品、成品或零件部件中小於 1000ppm)
- Textiles & other coated materials < 1 $\mu$ g/m<sup>2</sup> (PFOS/PFOA 紡織品或塗層材料中小於 1 $\mu$ g/m<sup>2</sup>)

#### 3.3 無鹵規範 Halogen Specifications :

供應商須符合下面的無鹵素規範:

The supplier shall comply with the following Halogen specifications:

無鹵素規範 IEC 61249-2-21 Halogen Free IEC 61249-2-21 :

- Chloride (Cl) <900ppm (氯含量小於 900ppm).
- Bromide(Br) <900ppm (溴含量小於 900ppm).
- Total halogens contained (Cl+Br) <1500ppm (總鹵素含量(氯加溴)量小於 1500ppm).

### 3.4 REACH :

歐盟化學總署於 2014 年 12 月 17 日正式公告將新的 6 項高度關注物質納入歐盟化學總署公告的高度關注物質清單，截止目前共有 161 項物質。詳細高關注度物質清單參見網址：<http://echa.europa.eu>

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### 3.5 衝突礦產 Conflict Minerals :

為了因應 2010 年 7 月美國總統歐巴馬簽署了第 4173 號法案(H.R. 4173)「華爾街改革與消費者保護法(Dodd-Frank Act)」，如有使用鈷(Co)、錫(Sn)、鈀(Pd)、鉭(Ta)、鎢(W)、金(Au)金屬之礦源需確認是否來自於剛果民主共和國

In response to Bill H.R. 4173 Dodd-Frank Act signed by U.S. President Obama in July 2010, if the use of cobalt (Co), stannum (Sn), palladium (Pd), tantalum (Ta), wolfram (W) or gold (Au) metal mineral resources is present, then we need to confirm whether the source of the material is from the Democratic Republic of the Congo;

註 1：「華爾街改革與消費者保護法(Dodd-Frank Act)」，該法案其中一項條文要求證券交易委員會規定從事有關衝突礦物貿易或使用的人士，必須確切追蹤礦石來源，包括鈾鈾鐵礦(Coltan)、錫石(Cassiterite)、金(Gold)及鎢錳鐵礦(Wolframite)。

註 2：「衝突礦產」- 部份金屬礦產已成為非洲剛果民主共和國及其鄰近國家武裝叛亂團體的主要財源，用來交易軍火、延續其與政府間的血腥衝突、蹂躪當地平民、強徵孩童充當娃娃兵與礦工，因此引發國際爭議不斷。

Note 1: One article in the bill of the Dodd-Frank Act requires the Securities Exchange Commission to stipulate that any person trading or using any conflict mineral duly trace the source of the mineral, including Coltan, Cassiterite, Gold and Wolframite.

Note 2: "Conflict Mineral" - certain metal minerals that have become the major financial source for organizations of armed insurrection in the Democratic Republic of Congo (DRC) and its neighboring countries to serve the purpose of arms trafficking, extending bloody conflicts with their government, ravaging local civilians, and drafting child soldiers and mineral workers by force, causing continuous international dispute.