

# Long-term availability management

## Application Note

Published by **ams-OSRAM AG**

Tobelbader Strasse 30,  
8141 Premstaetten Austria  
Phone +43 3136 500-0  
[ams-osram.com](http://ams-osram.com)  
© All rights reserved



# Long-term availability management

Application Note No. AN054



**Valid for:**  
LEDs for automotive applications

## Abstract

Innovation cycles are becoming shorter, LEDs are being improved year on year and newly developed products are available. At the same time, there is a desire for durable products and the correspondingly robust security of supply that will last for years, especially if sub-assemblies with LEDs are replaced. The obsolescence management (OM) at ams-OSRAM AG helps customers to develop a long-term supply strategy.

This application note describes the long-term availability management at ams-OSRAM AG.

---

## Table of contents

1	Reasons for obsolescence .....	3
2	Product life cycle .....	3
3	Long-term availability (LTA) .....	5

---

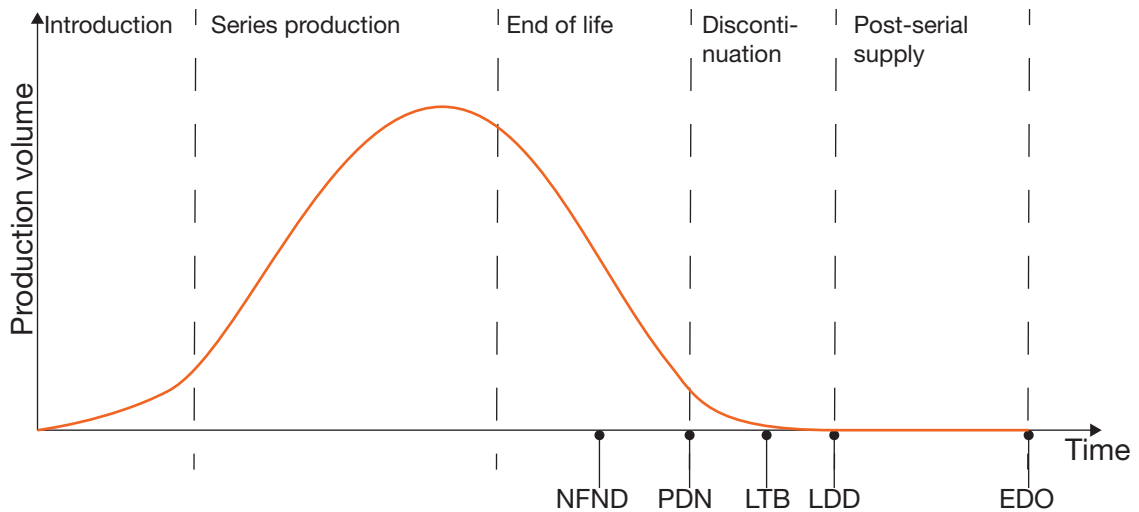
## 1 Reasons for obsolescence

There are many reasons why a product becomes obsolete. ams-OSRAM AG is striving to enhance products and to develop new LEDs for individual light applications. Therefore new products will replace older ones. Further examples of the obsolescence of LEDs are changes in standards or legislation. The obsolescence of suppliers products can also lead to the discontinuation of production. The product cycle is limited, due not least to market adjustments and economic reasons.

## 2 Product life cycle

The graphic in Figure 1 illustrates the principle life cycle curve of LED production. Its life cycle time depends on the product. Some are shorter, other products exist for many years.

Figure 1: Principle life cycle curve of a product production



- NFND Not for new Designs
- PDN Product discontinuation notice
- LTB Last time buy
- LDD Last delivery date
- EDO End of delivery obligation

As the graphic shows, each product starts with an introduction phase that extends to a series production phase. This production period is affected by the reasons for obsolescence, as described in chapter "1 Reasons for obsolescence". Afterwards, this the "End of life" phase for product production starts and the production volume is reduced. From this point it is not recommended to use the product for new application designs.

Customers will find a corresponding remark for the product on the website and also in the latest data sheet. Figure 2 shows an example of a product that has the status NFND. As may be seen, ams-OSRAM AG also offers a recommendation for replacement.

Figure 2: Example of an NFND product

### NFND marking with recommended replacement product on website

OSRAM  
Opto Semiconductors

Country Home OSRAM Group Careers

Applications Products

Home > Productselector > LA W5SM

## Golden DRAGON®, LA W5SM

Product features  
Golden DRAGON, amber, 1.4 Watt LED, 1000 mA max. current

[Datasheet](#)
[Application note](#)
[Electrical simulation](#)
[Tools](#)

**NFND**

### Replacement products

SYNIO9® P2720 , KR DMLS31.23  
This compact LED [...] [Read more](#)

### NFND marking in the data sheet

www.osram-os.com

## LA W5SM Golden DRAGON®

Applications  
— Signalling

Features:

- Package: white SMD package, colorless clear silicone resin
- Chip technology: Thinfilm
- Typ. Radiation: 120° (Lambertian emitter)
- Color:  $\lambda_{peak} = 617 \text{ nm}$  (amber)
- Optical efficacy: 86 lm/W
- Correlation Robustness Class: 3B
- ESD: 8 kV acc. to ANSI/ESDA/IEC J5-001 (HBM, Class 3B)

Not for new design

OSRAM  
Opto Semiconductors

A product discontinuation notice (PDN) follows by the end of this “End of life” phase. This phase provides the final opportunity to order the product (“last time buy”) and the final delivery is made by the end of this phase. Here starts the post serial supply.

### 3 Long-term availability (LTA)

With regard to DIN EN/IEC 62402 ams-OSRAM AG offers various possibilities for post-serial supply. This is an individual supply, depending on the product. For the long-term storage process ams-OSRAM AG proceeds according to DIN EN/IEC 62435-1. Please contact ams-OSRAM AG if post-serial supply is required. Therefore, it is essential to consider which factors may affect LEDs during long-term storage or adversely affect their processing, such as solderability.

**ABOUT ams OSRAM Group (SIX: AMS)**

The ams OSRAM Group (SIX: AMS) is a global leader in optical solutions. By adding intelligence to light and passion to innovation, we enrich people's lives. This is what we mean by Sensing is Life. With over 110 years of combined history, our core is defined by imagination, deep engineering expertise and the ability to provide global industrial capacity in sensor and light technologies. Our around 24,000 employees worldwide focus on innovation across sensing, illumination and visualization to make journeys safer, medical diagnosis more accurate and daily moments in communication a richer experience. Headquartered in Premstaetten/Graz (Austria) with a co-headquarters in Munich (Germany), the group achieved over EUR 5 billion revenues in 2021. Find out more about us on <https://ams-osram.com>

**DISCLAIMER**

**PLEASE CAREFULLY READ THE BELOW TERMS AND CONDITIONS BEFORE USING THE INFORMATION SHOWN HEREIN. IF YOU DO NOT AGREE WITH ANY OF THESE TERMS AND CONDITIONS, DO NOT USE THE INFORMATION.**

The information provided in this general information document was formulated using the utmost care; however, it is provided by ams-OSRAM AG or its Affiliates\* on an "as is" basis. Thus, ams-OSRAM AG or its Affiliates\* does not expressly or implicitly assume any warranty or liability whatsoever in relation to this information, including – but not limited to – warranties for correctness, completeness, marketability, fitness for any specific purpose, title, or non-infringement of rights. In no event shall ams-OSRAM AG or its Affiliates\* be liable – regardless of the legal theory – for any direct, indirect, special, incidental, exemplary, consequential, or punitive damages arising from the use of this information. This limitation shall apply even if ams-OSRAM AG or its Affiliates\* has been advised of possible damages. As some jurisdictions do not allow the exclusion of certain warranties or limitations of liabilities, the above limitations and exclusions might not apply. In such cases, the liability of ams-OSRAM AG or its Affiliates\* is limited to the greatest extent permitted in law.

ams-OSRAM AG or its Affiliates\* may change the provided information at any time without giving notice to users and is not obliged to provide any maintenance or support related to the provided information. The provided information is based on special conditions, which means that the possibility of changes cannot be precluded.

Any rights not expressly granted herein are reserved. Other than the right to use the information provided in this document, no other rights are granted nor shall any obligations requiring the granting of further rights be inferred. Any and all rights and licenses regarding patents and patent applications are expressly excluded.

It is prohibited to reproduce, transfer, distribute, or store all or part of the content of this document in any form without the prior written permission of ams-OSRAM AG or its Affiliates\* unless required to do so in accordance with applicable law..

\* ("Affiliate" means any existing or future entity: (i) directly or indirectly controlling a Party; (ii) under the same direct, indirect or joint ownership or control as a Party; or (iii) directly, indirectly or jointly owned or controlled by a Party. As used herein, the term "control" (including any variations thereof) means the power or authority, directly or indirectly, to direct or cause the direction of the management and policies of such Party or entity, whether through ownership of voting securities or other interests, by contract or otherwise.)



For further information on our products please see the Product Selector and scan this QR Code.

Published by ams-OSRAM AG  
Tobelbader Strasse 30, 8141 Premstaetten, Austria  
[ams-osram.com](https://ams-osram.com) © All Rights Reserved.

**Published by ams-OSRAM AG**

Tobelbader Strasse 30,  
8141 Premstaetten Austria

Phone +43 3136 500-0

[ams-osram.com](http://ams-osram.com)

© All rights reserved

