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# Product Data Sheet Classifications

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## Four Types of Product Data Sheet – Three Levels of Commitment

There are four basic types of product data sheets representing three progressions of confidence in (and information on) new Allegro MicroSystems' products and three levels of commitment to specifications.

### Product Preview Data Sheet

The first product data sheet is “speculative” and may be used to advise customers of proposed additions to a product line. These are labeled **PRODUCT PREVIEW**. The minimal specifications given here are only target or goal and may change in almost any manner without notice. A **PRODUCT PREVIEW DATA SHEET** may be used for several months and often undergoes several updates (even weekly or daily) as a result of marketing surveys, prospective customer feedback, and maybe even a few R & D samples that have been produced under ideal conditions through a pilot line. It is extremely unwise to design an application based on this data sheet, especially if samples are not yet available. In the worst case, the proposed product might never get beyond a market survey and never reach production.

### Advance Information Data Sheet

After the first prototypes are generated, and if initial customer feedback is positive, “informative” product data sheets may be used to advise customers of the proposed addition to the product line in an **ADVANCE INFORMATION DATA SHEET**. A *limited* quantity of preproduction samples will often be available. This data sheet will contain more substantial information, including interfacing with the customer's system, some specifications, and maybe even limited applications assistance. Specification details may still change without notice; any samples should meet all of the **ADVANCE INFORMATION DATA SHEET** specifications supplied with them; limits might be TBD (To Be Determined), wide open, or only typical values shown.

### Preliminary Information Data Sheet

Often, a **PRELIMINARY INFORMATION DATA SHEET** will be published. This also is “preproduction” information while trying to find a significant customer. It may also be first production while attempting to reduce costs through device improvements. Most specification limits will be defined (and many will be tighter than the **Advance Information Data Sheet**) and many typical values may be included; minor changes will be expected as the significant customer defines *its* application (that's not necessarily the same as *your* application) or characteristics spreads become better controlled. The good part is that these products are *usually* safe to design in as significant investment has already been made in the product development, samples should be available in *almost* production quantities, and the device will almost always go into full production, even if only to the general-sale market.

### Interim or Limited Distribution Data Sheet

Product Preview/Design Objective, Advance Information, and Preliminary Data are labels on data sheets to describe the *product* status. Interim and Limited Distribution are used to describe the *data sheet* status rather than the product status.

In some cases, such as when a proprietary product becomes available for general sale, an **INTERIM DATA SHEET** might be released until complete characterization data and applications information can be added. Because the proprietary device was for one customer in a specific application, specification changes may sometimes occur to improve yields in general applications. Interim, or “temporary” implies that more complete specifications or applications information will be coming.

**LIMITED DISTRIBUTION** or **RESTRICTED** labels can be applied for any of several reasons, for example, legal restrictions by the original customer, production capacity limitations, a lower-cost version of an expensive popular product, or because a patent application is pending.

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## Definitive Data Sheet

DEFINITIVE DATA is the “final” data sheet that defines the long-term, warranted production limits. It always includes some boilerplate to the effect that the right to make “departures from the detail specifications to permit improvements in the design” is reserved. This is supposed to allow improvements in specifications and insignificant modifications that do not affect form, fit, or function in original applications. It does not permit specification degradation due to out-of-control manufacturing.

## Revisions, and Other Nasty Thoughts

For whatever type of data sheet, it is always advisable to be using the latest information available. In the extreme, designing in an obsolete device is embarrassing for everyone and may result in *shortened careers*. To everyone’s benefit, preproduction data sheets are usually conspicuously dated and carry a legend such as “**Subject To Change Without Notice**”. Unfortunately, the age of definitive data sheets is not always so obvious (check the copyright date and manufacturer’s publication control codes). In other words — always check with the manufacturer for the *latest* available information before “freezing” a design or releasing it to production.

Allegro definitive data sheets carry a publication control number on the first page, which is intended primarily for internal purposes. A letter added to the control number identifies the revision (a technical change to specifications, i.e., form, fit, or function) while a symbol (\*, †, ‡, §, ¶, # in that order) after the control number identifies minor editorial changes or corrections.

## NND

Data sheets and price lists may be marked “**NND**” or “**NOT FOR NEW DESIGN**” after a device becomes old and is seeing end-of-life regarding sales or manufacturing, or a newer replacement device is coming. This classification describes a device that may still be in production but is used to restrict business to only current customer applications. New customers or new applications for these products is discouraged. Samples are not available. Last-time-buy or even obsolescence in the near future is probable.

## More Information

The information in this publication is taken from Allegro Publication [26000](#), *A Complete Guide to Data Sheets* and reflects JEDEC Publication 103, *Suggested Product-Documentation Classification and Disclaimers*.

Raymond Dewey, the author of this paper, is a retired Technical Information Coordinator for the Communications Department of Allegro MicroSystems, LLC (previously Sprague Semiconductor Group). In this capacity he was responsible for the generation of the company’s product data sheets. Mr. Dewey was also the chairman of the EIA/JEDEC JC-10 Committee on Semiconductor Terms and Definitions. The opinions expressed here are his and do not necessarily represent those of Allegro MicroSystems or EIA/JEDEC.

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