



Frequently Asked Questions (FAQ's)



Occasionally we get questions from our customers and thought we would share some of them with our Sentinels readers, as well as our responses.

On your line card you have suppliers that appear to sell the same products.

Why do you have multiple lines? Isn't that a conflict?

Not all manufacturers carry the exact same product lines and part number offerings, particularly in bare die. Between new product releases and life-time buys, our suppliers bare die offerings are not mirror images of one another. One supplier may think a specific part number does not show enough purchase history to pull a wafer off their production line open it up as a bare die part - whereas another supplier might decide it's worthwhile in making it available to us. As well, two manufacturers may offer the same part number, but often times the part number could have subtle differences in the die size, in the electrical characteristics and variances in pad locations - all of which make a die distributor such as Semi Dice, more important than ever. Our knowledge about each of our suppliers bare die product offerings is quite extensive and we welcome the opportunity to share this information with our customers.

Why don't you post your inventory on the website?

Our primary goal is to be the best, service-minded die distributor in the business. We believe in order to provide that kind of service, the more personalized it is, the better. It ties into our company not having voice mail. You will always talk to a live person when you call Semi Dice. Posting inventory has its drawbacks. Let's say we decide to post inventory and you pull part number 2N222A and it shows a stock level well below what you are looking for. The last thing we want you to do is look elsewhere for product. You'll still need to contact us to find out exact delivery, so if you had called us direct in the first place, we would have told you that although we don't show stock on the 2N222A's (heaven forbid that ever happens!) we have die coming in from our supplier and will be able to ship product within 24-hours.

Another problem that could present itself - take part number 1N4148. We might show zero stock, but since it's sourced from a 1N914 (which might have 100,000 pcs. in stock), it could send the customer away from us as they may not be aware of the different part number nomenclatures. Although the technology advances offered today via the internet has its upside, it does have its limitations.

The Semi Dice, Inc.

SENTINEL

Information for the Microelectronics Industry

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Full Speed Ahead

What happened to the summer slowdown? Fortunately for Semi Dice, the summer doldrums did not come to visit. We are cautiously optimistic, there are positive signs and we are seeing increased activity from our customers. Semi Dice is well positioned to supply product on a timely basis and have strategically stocked our inventory levels to satisfy a broad customer base. We don't use a crystal ball and have never been comfortable guessing where the future of the industry might be headed, but certainly our suppliers are reporting increased delivery times, so please take this into consideration when considering your bare die requirements.

Look for the launch of our newly designed website this fall. Beyond the updated look, we will be adding new pages that will include supplier profiles, links and new updates on preferred products.

Keep your questions and comments coming, we appreciate the feedback.

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After The Order Ships

It is our belief that we are the best die distributor in the industry. Our competitors might attempt to make the same statement, but we believe our actions speak louder than words.

One important factor that ensures our position at the top and leaves the rest in the dust is what Semi Dice does *after* the order ships. Yes, we willingly and cheerfully accept orders, but we work just as hard after the parts leave the shipping dock. We recognize that our job doesn't end when the order is marked closed and filed away.

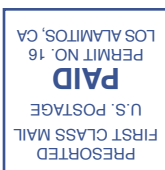
Once die product is in the hands of our customers, all of the questions, challenges and problems that are associated with, "dealing with die" can be many and we have heard just about everything. We have customers that range from the first time user wanting to know if it's okay to use a saliva-moistened fingertip to lift the die out of a wafer pack, to the experienced user placing bare die into MCM's.

We recognize that our customers have different application-specific challenges. To meet those challenges, we work closely with our suppliers to support our customers from the beginning design-in stages, in prototyping and through the production run phase. From start to finish, when you are dealing with die, a variety of different situations will present themselves along the way.

After we ship product, a challenge our customers quickly face is the variety of die assembly methods that are available. Check out the insert in this issue of the Sentinel that deals with this very subject. National Semiconductor has provided a review of assembly techniques that focuses on the positive aspects and the limitations of die attach that system and board manufacturers using bare die, or flip-chip will find very useful.

Also, in keeping with the position we are here to help and not just take orders, the reader will find another valuable insert in this issue called, "The Care and Handling of Bare Die". If there was ever an article for the prospective or active die user to keep on file, this is it.

Working hand-in-hand with our suppliers and customers enables us to offer our support - before and *after* the sale.



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SEMI DICE



SEMI DICE
Bare Die Distribution

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What's News

Another Year Older

Not only older and wiser, Semi Dice also seems to be getting better and better. With 28 years under our belts and still going strong, our ability to supply bare die to the industry for another couple of decades doesn't seem so far-fetched. This recent milestone is possible because we place a high value on the relationships with our employees, customers and suppliers. We couldn't do it with them.

Wafer Processing

Yes, we can handle the sawing of your wafers. We are seeing increased demand for processing of 4 and 6-inch wafers and have the capability to handle 8-inch as well. We process wafers for several of the suppliers on our line card to whatever requirements they deem necessary; singulating, quartering or halving wafers. It's all in the handling and our experienced lab employees are some of the best in the industry. In the next issue of the Sentinel, we will go into further detail about our wafer-processing abilities – but don't wait, if you need help or need information now - call us today (800) 345-6633.

11th Annual Intl. KGD Packaging & Test Workshop Sept. 12-15, 2004, Napa, CA

www.napakgd.com

This workshop is an annual event, hosted by the Die Products Consortium (DPC), www.dieproducts.org, a collaborative effort to enlarge markets for semiconductor die products including bare die, flip chip and wafer-level CSP. This workshop has built a reputation as the leading source for information on semiconductor products, test, assembly, manufacturing and business issues at the forefront of the microelectronics industry. Once again the workshop this year was not only worthwhile, but offered valuable information and was attended by other industry leaders. We encourage all die users to check into this event www.napakgd.com and attend in 2005.

IMAPS 2004

37th Intl. Symposium on Microelectronics


Semi Dice is exhibiting November 14-18, 2004 at the Long Beach Convention Center, in Long Beach, California. The show tag line this year is, "Ride the tech wave...into the future" – so make sure to stop by our booth # 655 and say hello. If you need assistance with show registration or have conference questions, please give us a call.

Supplier Profiles

Get Active, Buy Passives!

Semi Dice is proud to be the sole bare die distributor that carries both active and passive lines. We see the benefit of selling both commodities, primarily due to the fact that most modules makers use both active and passive devices. It makes it easier for our customers to have a "one-stop shopping" as they say. Sure, passive sales are a very small portion of our overall business, but we see it as just another way of providing a convenient service to our customers.

Johanson Dielectrics

The relationship we have with  Johanson Dielectrics goes back years. JDI has over 30 years of experience supplying high quality ceramic chip capacitors. Their focus in the areas of product development, new material technology advancements, automated manufacturing techniques and state of the art statistical process analysis ensure their status as leaders in the industry.

JDI has a wide product offering of Capacitors: Ceramic SMT and Leaded High Voltage and High Temperature, Y2 Safety Certified, Tip & Ring, Tanceram (for Tantalum replacement), Dual and Multi Capacitor Arrays, Low Inductance, X2Y and Switchmode.

The combination of a high quality and extensive product offering, low lead times, and a worldwide network of sales and manufacturing locations make Johanson Dielectrics a world-class business partner.




Novacap

One of the longer relationships we have had with a supplier on our line card is with passive line, Novacap. Over the years they have been a loyal and steady source for applications specific multilayer capacitors. Products include caps from 0402 to large high voltage units (up to 10kV) for

commercial or high reliability applications such as medical implantable and life support. High temperature caps including X8R for harsh environments such as oil exploration and automotive/avionics engine compartment compartment circuitry and thin film for smart card applications. Novacap's latest product catalog V. 6-04-PC is available now and can be requested on-line.

State of the Art

State of the Art manufactures high reliability thick and thin film resistive  components for the surface mount and hybrid electronic industries. Innovative design, quality and reliability have resulted in State of the Art having the broadest range of thin and thick film chip resistors, surface mount networks and custom circuits available.

VISHAY ELECTRO-FILMS

Vishay Electro-Films

Electro-Films has a complete line of thin-film components and networks on ceramic and silicon including resistors, capacitors, inductors and microwave components. Their product line includes a variety of discrete resistors, resistor arrays, resistor/capacitor filter networks and inductors. Their high quality patterned thin-film substrates are produced in high volume for both the hybrid circuit and microwave industries. Since CMD has exited the bare die market, Electro-Films should be considered as a suitable replacement. Call your Semi Dice salesperson today for a quote.

To receive information on our passive lines, go to our website: www.semidice.com and we will gladly provide you with CD's, catalogs, quotes and design-in samples if requested.



Employee of the Quarter

Thangyou (Tina) Prum

Hi Rel Die Loader

Los Alamitos Division

It gave us great pleasure to announce that Tina Prum was selected as the Semi Dice Employee of the Quarter for the second quarter. Tina's hard work, dedication and outstanding attitude has earned her the special recognition of EOQ.

Although she started out as a hi-rel die loader, Tina willingly and eagerly took on not only the training and working in the test area with the LAT qualification testing, she also is performing wire bonding when it's needed.

Tina has proved to be reliable, flexible and has performed very well with her new tasks. She is willing to learn new things and go the extra mile.



Congratulations Tina on your outstanding achievement!

