

Intel Ohio – The Silicon heartland

Preventing Human Contamination in a Clean Room Challenge

Background:

Semiconductor manufacturing is very sensitive to defects. Due to some features measuring in the low nanometers range which is about 10,000 smaller than human hair. Hence, over the past decades significant improvements have been made to minimize defects from the equipment used in the manufacturing process. Another source of defects is human contamination. Over the past decades significant progress has been made to improve clean room garments to help prevent human contamination i.e., hair, dirty shoes, clothing etc.

Challenge:

Propose a cleanroom garment and/or device that Intel can use today and into the future to prevent human elemental contamination of cleanroom space. This garment and/or device will need to be inclusive. Hence, comfortable when used by women, men and during equipment maintenance activities etc. This challenge has been written to allow for a creative mindset! At Intel as we say, “have fun with it and develop something amazing”!

Prizes

1st place: \$100 gifts cards. Intel Branded Skullcandy Riff Bluetooth Headphones & other Intel swag

2nd place: \$50 Gifts Cards. Intel Branded Skullcandy Cassette Bluetooth Headphones & other Intel swag

3rd place: \$25 Gift Cards. Intel Branded Skullcandy Jib True Wireless Earbuds & other Intel swag

Judging Criteria:

1. User Comfort – Will all users (women & men) find garment and/or device comfortable while performing any task?
2. Contamination – does it improve elemental human contamination? Any added features that will allow future upgrades or changes to garments or devices as the need arises?
3. Creativity – is the solution a paradigm shift? Does it provide a revised approach to tackling this problem?
4. Concept & Feasibility – is the proposed garment and device practical and manufacturable? How does your prototype compare to your proposed design?

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