

## AI Super Resolution Fidelity Recovery IC (RTD2892NND)



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### Winning Reason

We live in a time of increasingly high demand for HD content, yet video quality is often compressed due to the limits of the transmission bandwidth, or the video itself was shot in low resolution. If the current technology is not improved, then consumers will not be satisfied. This is why there is an urgent need for an innovative and effective solution to the problem we are currently faced with.

The innovative aspect of this product resides in its use of powerful AI hardware computing and an adaptive neural network model to calculate and restore a video to its original image quality and enhance its details. The program's recognition capabilities are also adaptable for different settings and objects. To upgrade current imaging tech to that of high quality, it only needs to be processed with an amplifying chip. This is the kind of innovation and drive that is so urgently needed for the existing content and display industries, and the market potential here is huge.

### Product Feature

1. Adoption of neural network model for super resolution scaling
  - 1-1. Restores the fidelity of low resolution video due to over-compression or destruction
  - 1-2. Enhances the texture of original video
  - 1-3. Removes the noise adaptively based on the content
2. Additional picture quality enhancement (e.g., sharpness and noise reduction)
3. Adaptive neural network model for different scenes and objects
4. Embedded DDR KGD for smaller footprint
5. Backend IC for an upgrade of any display device