

## FAQ

Why are "HD-SDI" cameras more widely available than certified HDcctv-compliant cameras?

- Generation 1 HDcctv products incorporate chips whose designs pre-date HDcctv 1.0
- Most pre-HDcctv-1.0 chips do not implement all the functions needed to certify a camera as HDcctv compliant

Why are HDcctv camera prices similar to those of CCTV cameras?

• The camera architecture and dominant make-cost factors in HDcctv and CCTV cameras are identical, so manufacturing costs are very close at similar volumes

Why do Generation 1 HDcctv DVRs cost more than CCTV DVRs?

- HDcctv presents 6 times as many pixels to process
- HDcctv presents 6 times as many pixels to store
- No specialized multi-channel receiver (RX) chips were available when Generation 1 HDcctv DVRs were designed

Why do manufacturers expect Generation 2 HDcctv DVRs to cost about the same as CCTV DVRs?

- More pixels to process than CCTV: Higher-performance pixel-processing chips are now available
- More pixels to store: Hard disk drive prices are declining; meanwhile, compression chip performance is increasing (even as prices continue to decline)
- Need specialized multi-channel receiver (RX) chips
  - The first HDcctv-ready Quad Receiver ASIC was introduced in April 2012

What are the advantages of HDcctv cameras over MP IP cameras?

- HDcctv cameras deliver the highest-quality HD live views
- HDcctv cameras and DVRs are as easy as regular CCTV cameras and DVRs to install and set up
- HDcctv cameras and DVRs can usually re-use legacy cabling

What are the disadvantages of HDcctv cameras for HD surveillance?

- HDcctv cameras can be more expensive than MP IP cameras for large spaces that are sparsely covered with cameras
- No wireless solution is yet available for HDcctv
- HDcctv cameras transmit only HDTV video: 720p25/30/50/60 and 1080p25/30. Customers who need higher frame rates or higher resolution must turn to MP IP cameras

How much has each company committed to each product?

- The semiconductor manufacturers have not published this information on an individual basis
- A typical fabless semiconductor product requires about US\$10m investment from design start to mass production ramp
- US\$30m for the ten Generation 2 chips shown in the timeline is therefore likely a very conservative estimate