

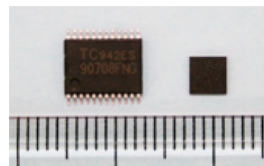
## Products

[ASSPs](#)[Product Introduction](#)[Topics](#)[Applications](#)[Company Profile](#)[News and Event](#)[Support](#)[Environmental Activities](#)[Terms of Use](#)[Site Map](#)

## TC90708FNG/FLG HDMI 1.4 Adapter IC

- Can be used for any kind of HDMI application, such as televisions, DVD players/recorders, Blu-ray recorders, digital cameras, camcorders, set-top boxes, audio amplifiers and PCs.
- Can be used as an add-on to existing HDMI 1.3 systems to provide HDMI 1.4 compliance.
- Supports HEC(HDMI Ethernet Channel) and ARC(Audio Return Channel).
- Available in two types of packages, SSOP and VQON.

Recently, HDM has found widespread use in audiovisual equipment as a means of addressing the requirements for high picture quality and content protection. HDMI Licensing, LLC released HDMI Specification Version 1.4 on June 8, 2009, which supports all the features of HDMI 1.3 and adds new features such as HEC and ARC. The TC90708FNG/FLG can be added to existing HDMI 1.3 systems to provide the HEC and ARC functions.



HDMI: High-Definition Multimedia Interface

- [Key Features and General Specifications](#)
- [Target Applications](#)
- [Application Examples](#)
- [Package Outline Dimensions](#)
- [Contacts](#)

### Key Features and General Specifications

- ▶ Conversion between Ethernet and HEC
- ▶ S/PDIF support
- ▶ 25-Ω driver
- ▶ HDMI sink and source capabilities
- ▶ Four slave addresses
- ▶ Two open-drain output ports
- ▶ I<sup>2</sup>C bus control

#### TC90708 General Specifications

Part Number	TC90708FNG/FLG
Package	SSOP24 (0.65-mm lead pitch) VQON24 (0.5-mm lead pitch)
Withstanding voltage	3.6V
Current	160mA@V <sub>DD</sub> =3.3V
Temperature range	0...~65...
Mass Production*	Scheduled to begin in August 2010. *TC90708FNG(SSOP24)

### Target Applications

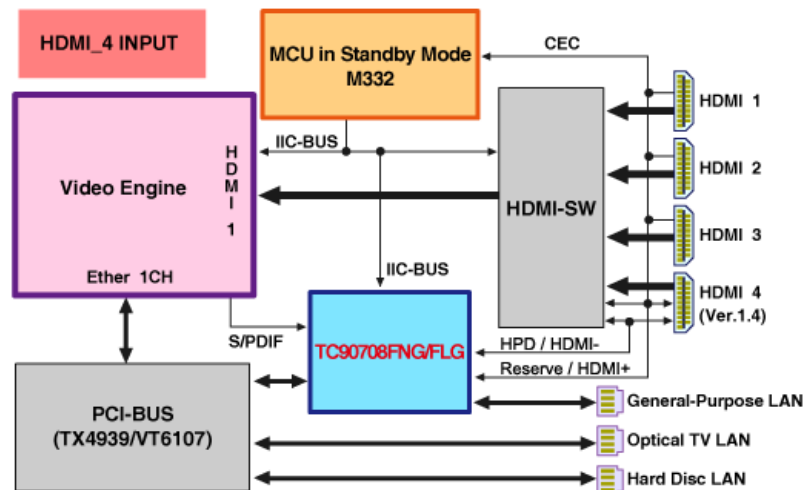
The 90708FNG/FLG is intended not only for use in digital TVs, but also in a wide variety of HDMI applications such as DVD players/recorders, Blu-ray recorders, hard disk recorders, game consoles, digital cameras, camcorders and audio amplifiers.



### Application Examples

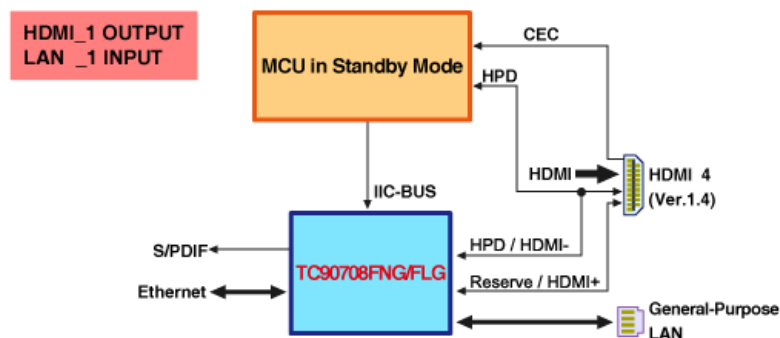
#### 1. Sink devices (i.e., devices that receive video and audio signals such as televisions)

The 90708FNG/FLG can be added to HDMI 1.3 input terminals on sink devices such as TVs to



## 2. Source devices (i.e., devices that send video and audio signals such as Blu-ray recorders, DVD players/recorders and hard disk recorders)

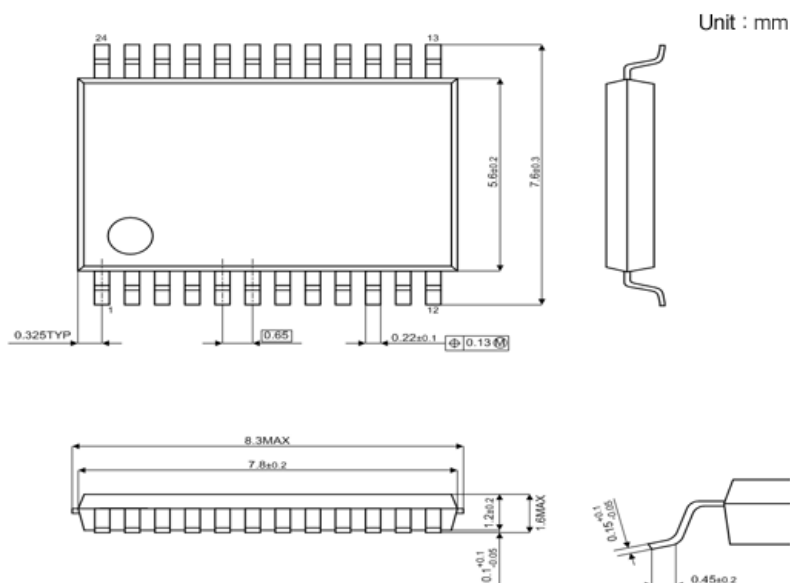
The 90708FNG/FLG can be added to HDMI 1.3 output terminals on source devices such as DVD players/recorders, Blu-ray recorders or hard disk recorders to support the new HDMI 1.4 features (HEC and ARC).



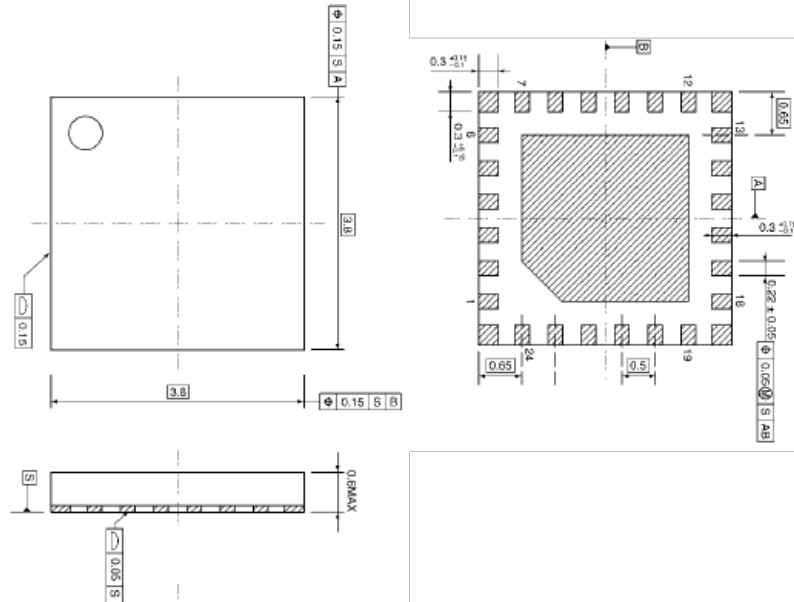
HDMI:High-Definition Multimedia Interface  
S/PDIF:Sony/Philips Digital Interface Format  
HEC:HDMI Ethernet Channel  
ARC:Audio Return Channel

## Package Outline Dimensions

Part number: TC90708FNG / PKG : SSOP24-P-300-0.65A



Part number: TC90708FLG / PKG : VQON24-P-0404-0.50A



## Contacts

If you are interested in the TC90708FNG/FLG, click one of these links:

- ▶ Technical queries
  - [Contact Us](#)
- ▶ Queries about purchasing, sampling and IC reliability
  - [Overseas Sales](#)

[Top of this page ▲](#)

## Links

### Other Topics

- [4K2K Scaler: TC35770XBG](#)( 31 Aug, 2012 )

[Top of this page ▲](#)