

# Hot-Swap Function for GSM Gateway Modules



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# GSM Gateway Hardware Platform

# GSM Gateway Hardware Platform

Model	AP-GS1500	AP-GS2000	AP-GS2500	AP-GS3000	AP-GS5000
					
Available Modules	AP-N1-GSM4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4	AP-N1-GSM4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM8 AP-N1-FXS8 AP-N1-FXO8 AP-N1-E1 AP-N1-2E1
GSM Channel	Up to 8 Channel	Up to 12 Channel	Up to 16 Channel	Up to 36 Channel	Up to 80 Channel
GSM Antenna	One(1) / 4 Channel GSM Module (AP-N1-GSM4)	One(1) / 4 Channel GSM Module (AP-N1-GSM4)	One(1) / 4 Channel GSM Module (AP-N1-GSM4)	One(1) / 4 Channel GSM Module (AP-N1-GSM4)	Two(2) / 8 Channel GSM Module(AP-N1-GSM8)
Module Slot	Two(2) Module Slots for GSM	Three(3) Module Slots for GSM	Four(4) Module Slots for GSM	Nine(9) Module Slots for GSM, E1/T1 Module Slot	Ten(10) Module Slots for GSM, E1/T1 Module Slot
LAN Port	2	2	2	2	2
Console	1	1	1	1	1
Power	Single PSU	Single PSU	Single PSU	Single PSU	Dual PSU (module)



# GSM & VoIP Modules

# GSM & VoIP Modules (Hot-Swap)

High-end  
DSP

## AP-GS3000 Voice Modules

**AP-N1-GSM4** 4-Port GSM Module



**AP-N1-CDMA4** 4-Port CDMA Module



**AP-N1-FXS8** 8-Port FXS Module



**AP-N1-FXO8** 8-Port FXO Module



**AP-N1-FXS4O4** 4-Port FXS&4-Port FXO Module



**AP-N1-E1** 1-Port Digital E1/T1 Module



# GSM & VoIP Modules (Hot-Swap)

High-end  
DSP

## AP-GS5000 Voice Modules

**AP-N1-GSM8** 8-Port GSM Module



**AP-N1-FXS8** 8-Port FXS Module



**AP-N1-FXO8** 8-Port FXO Module



**AP-N1-2E1** 2-Port Digital E1/T1 Module



# Hot-Swap Function Overview

High-end  
DSP

- Hot-Swap Function

- To insert/delete a new VoIP module while in-service state.
- Support push button switch for a VoIP module Hot-Swap
- Support status check LED

Example : AP-GS3000 GSM Gateway



Hot-Swap Status LED

Push Button Switch for Hot-Swap

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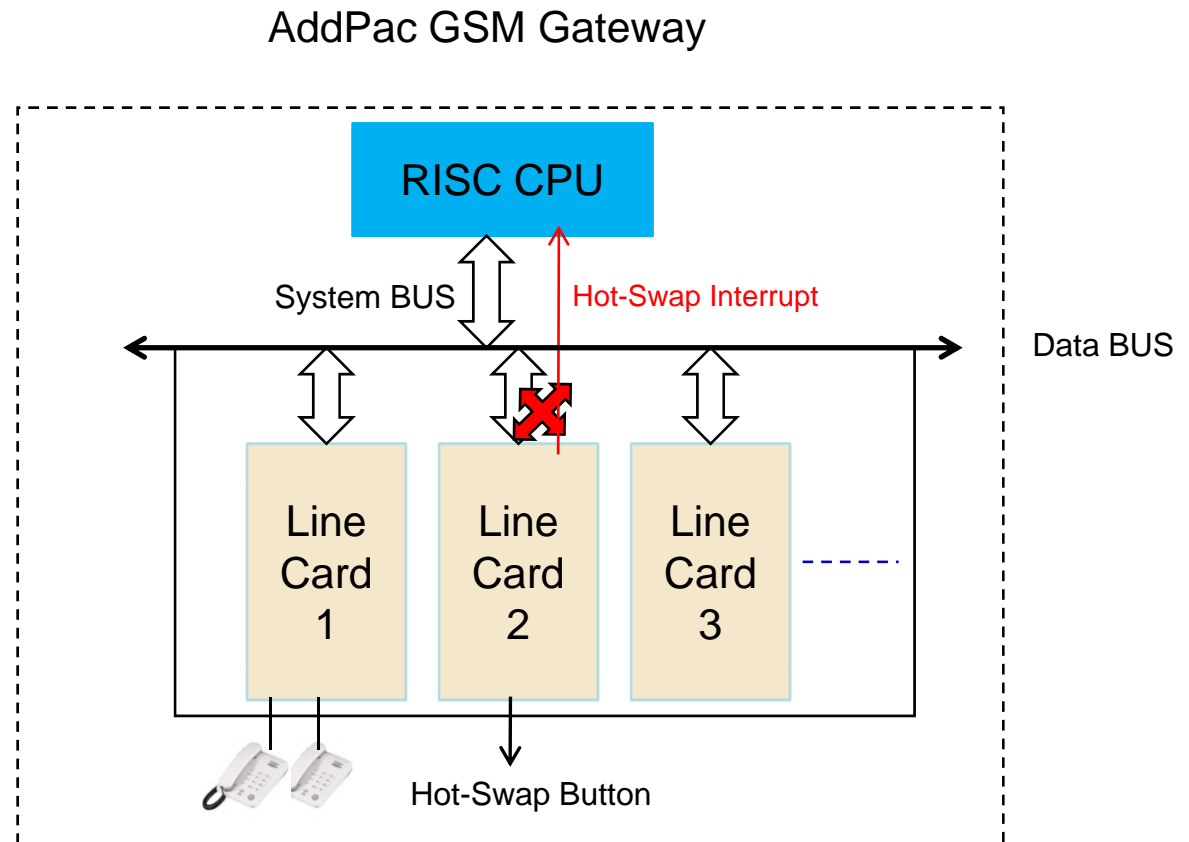
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# System Architecture for Hot-Swap Function

## Hot-Swap Procedure

1. Hot-Swap LED ON
2. Push Hot-Swap Button
3. CPU Hot-Swap Register Polling
4. Bit High -> Low
5. Terminate Card Program
6. Hot-Swap LED OFF



# Example : AP-GS3000 GSM Module Exchange

1		<p>&lt;Push Hot-Swap Button&gt; Press Hot-Swap button for 3 seconds. LED will be turned off to remove the module.</p>
2		<p>&lt;Eject Module&gt; Check the status of LED OFF. You may remove the module from VoIP Gateway safely.</p>
3		<p>&lt;Insert Module&gt; You may install the module in VoIP gateway safely.</p>

# GSM Gateway Series

# Thank you!

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