

# **IT8282M**

**Enhanced K8 Power Sequence Controller  
for Desktop System**

**Preliminary Specification V0.4**

**(For C Version)**

**ITE TECH. INC.**

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Please note that the IT8282M V0.4 is applicable to the C version.*



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## 1. Features

- **Enhanced K8 Power Sequence Controller**
  - Built-in enhanced voltage comparator
  - Supports Desktop platform
- **System Power-Good Generation**
  - Built-in power-good glue logic
  - Integrated panel button reset input
- **Single 5VSB Power Supply**
- **16-pin SOP**

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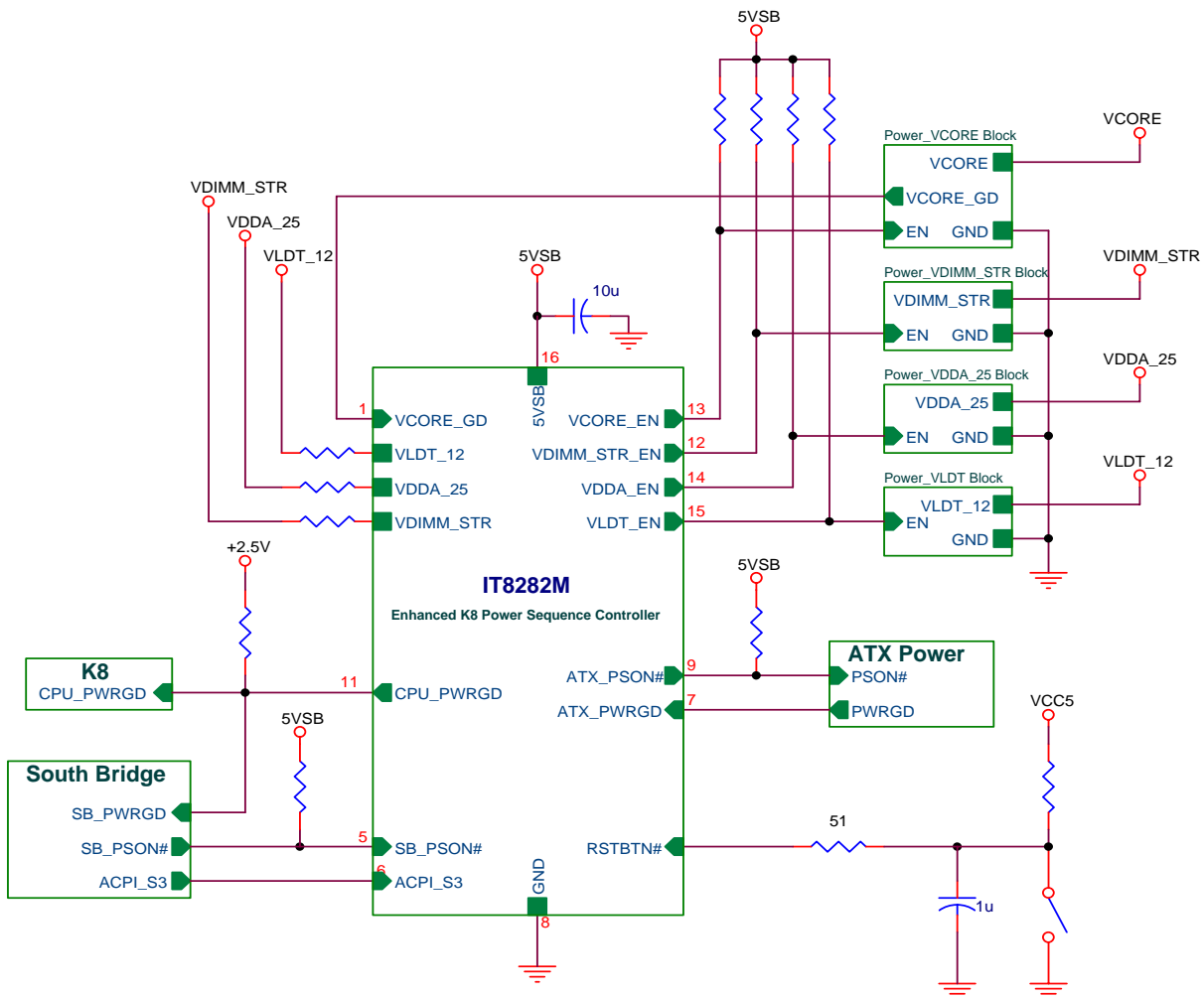


## 2. General Description

The IT8282M incorporates glue logics for AMD K8 CPU power sequence application and provides the system power-good request.

Outstanding features of this controller IC include special voltage comparators for VLDT, VDDA and VDIMM\_STR power detected without the need of any external components. All power-good generation circuits support AMD K8 main board design for saving glue logics cost.

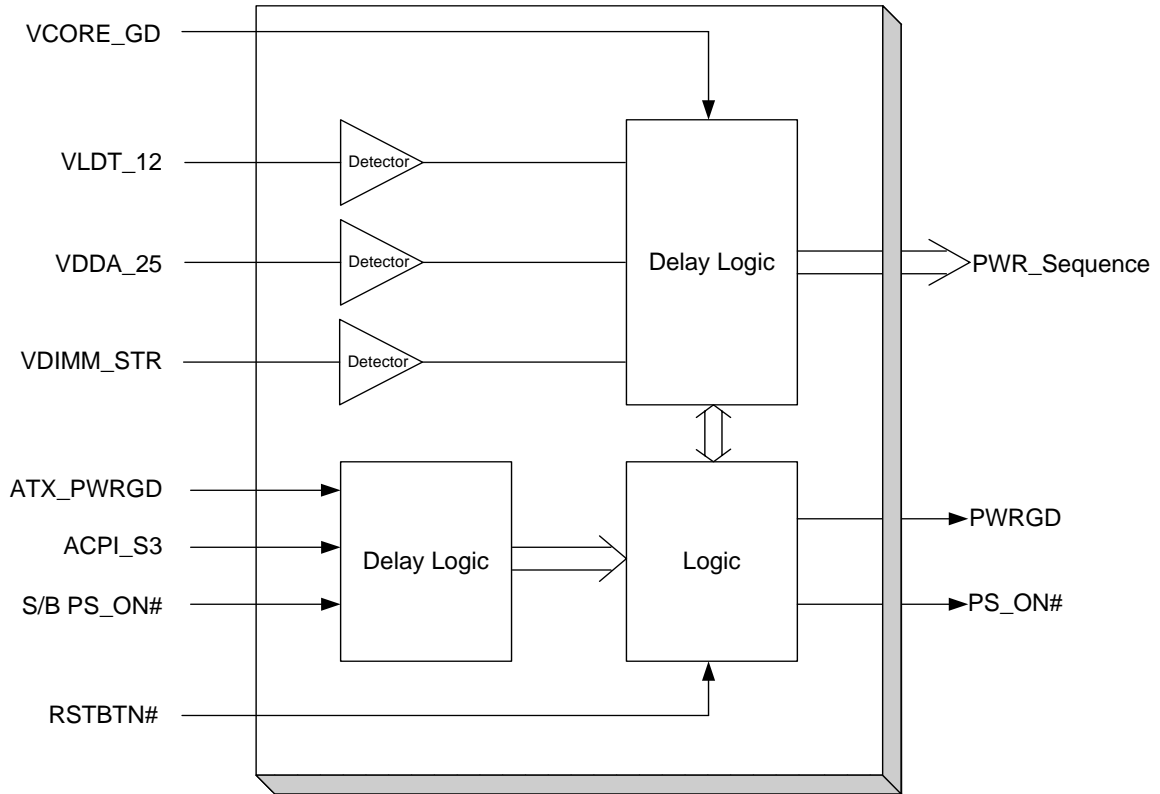
The following figure is the application hint.



**Figure 2-1. Application Circuit**

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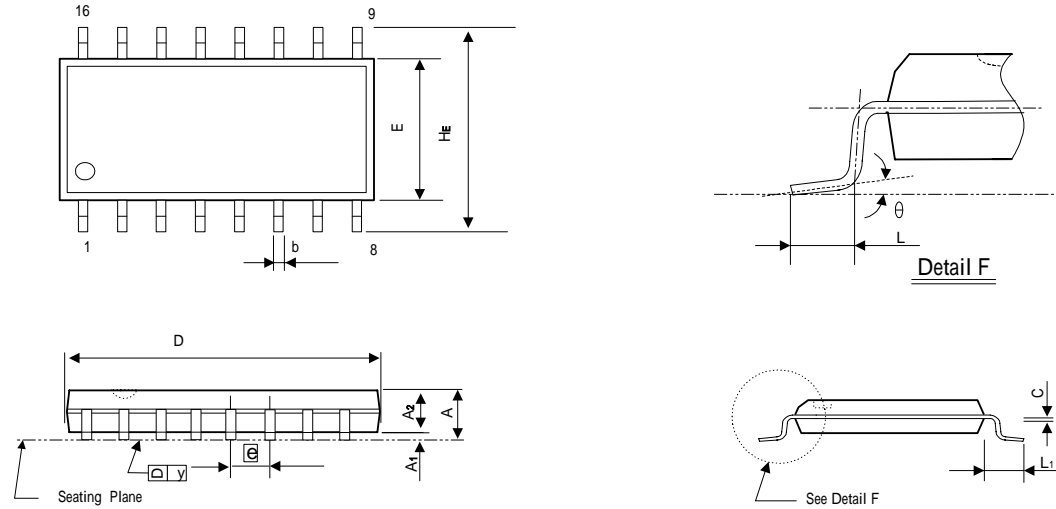
**3. Block Diagram**



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**4. Package Information**

**SOP16L Outline Dimensions**



inches/mm

unit:

Symbol	Dimension in inches			Dimension in mm		
	Min	Nom	Max	Min	Nom	Max
A	0.053	0.064	0.069	1.35	1.63	1.75
A <sub>1</sub>	0.004	0.006	0.010	0.10	0.15	0.25
A <sub>2</sub>	0.051	0.055	0.059	1.30	1.40	1.50
b	0.013	0.016	0.020	0.33	0.41	0.51
C	0.007	—	0.010	0.19	—	0.25
D	0.386	0.390	0.394	9.80	9.91	10.01
E	0.150	0.154	0.157	3.80	3.90	4.00
@	0.050BSC			1.27BSC		
H <sub>E</sub>	0.228	0.236	0.244	5.80	6.00	6.20
L	0.016	0.025	0.050	0.40	0.64	1.27
L <sub>1</sub>	0.042REF.			1.07REF.		
y	—	—	0.004	—	—	0.10
θ	0°	—	8°	0°	—	8°

**Note:**

1. Controlling dimension : inch
2. Dimension "D" and "E" do not include mold protrusion.  
"D" and "E" are maximum plastic body size dimension including mold mismatch.
3. Dimension "b" dose not include dambar protrusion.  
Dambar cannot be located on the lower radius of the foot.
4. Reference Document : JEDEC SPEC MS-012.

DI-SOP16(150mil Body)v3

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**5. Ordering Information**

Part No.	Package
IT8282M	16 SOP

ITE also provides lead-free component. Please mark "-L" at the end of the Part No. when the parts ordered are lead-free.

## ITE TECH. INC. TERMS AND CONDITIONS OF SALE (Rev: 2005)

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ITE Tech. Inc. ("Seller") is a company headquartered in Taiwan, Republic of China, and incorporated under laws of Republic of China. Buyer is a company or an entity, purchasing product from ITE Tech. Inc.

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BUYER ACCEPTS THESE TERMS (i) BY WRITTEN ACCEPTANCE (BY PURCHASE ORDER OR OTHERWISE), OR (ii) BY FAILURE TO RETURN GOODS DESCRIBED ON THE FACE OF THE PACKING LIST WITHIN FIVE DAYS OF THEIR DELIVERY.

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- Shipments are subject to availability. Seller shall make every reasonable effort to meet the date(s) quoted or acknowledged, and if Seller makes such effort, Seller will not be liable for any delays.

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- Buyer will not return any goods without first obtaining a customer return order number.
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- No action against Seller, whether for breach, indemnification, contribution or otherwise, shall be commenced more than one year after the cause of action has accrued, or more than one year after either the Buyer, user or other person knew or with reasonable diligence should have known of the matter or of any claim of dissatisfaction or defect involved; and no such claim may be brought unless Seller has first been given commercially reasonable notice, a full written explanation of all pertinent details, and a good faith opportunity to resolve the matter.
- BUYER EXPRESSLY AGREES TO THE LIMITATIONS OF THIS PARAGRAPH 5 AND TO THEIR REASONABLENESS.

### 6. SUBSTITUTIONS AND MODIFICATIONS

Seller may at any time make substitutions for product ordered which do not materially and adversely affect overall performance with the then current specifications in the typical and intended use. Seller reserves the right to halt deliveries and shipments and alter specifications and prices without notice. Buyer shall verify that the literature and information is current before purchasing.

### 7. CANCELLATION

The purchase contract may not be canceled by Buyer except with written consent by Seller and Buyer's payment of reasonable cancellation charges (including but not be limited to expenses already incurred for labor and material, overhead, commitments made by Seller, and a reasonable profit).

### 8. INDEMNIFICATION

Seller will, at its own expense, assist Buyer with technical support and information in connection with any claim that any parts as shipped by Seller under the purchase order infringe any valid and enforceable copyright, or trademark, provided however, that Buyer (i) gives immediate written notice to Seller, (ii) permits Seller to participate and to defend if Seller requests to do so, and (iii) gives Seller all needed information, assistance and authority. However, Seller will not be responsible for infringements resulting from anything not entirely manufactured by Seller, or from any combination with products, equipment, or materials not furnished by Seller. Seller will have no liability with respect to intellectual property matters arising out of products made to Buyer's specifications, code, or designs.

Except as expressly stated in this Paragraph 8 or in another writing signed by an authorized officer, Seller makes no representations and/or warranties with respect to intellectual and/or industrial property and/or with respect to claims of infringement. Except as to claims Seller agrees in writing to defend, BUYER WILL INDEMNIFY, DEFEND AND HOLD HARMLESS SELLER FROM ALL CLAIMS, COSTS, LOSSES AND DAMAGES (INCLUDING ATTORNEYS FEES) AGAINST AND/OR ARISING OUT OF GOODS SOLD AND/OR SHIPPED HEREUNDER.

### 9. NO CONFIDENTIAL INFORMATION

Seller shall have no obligation to hold any information in confidence except as provided in a separate non-disclosure agreement signed by both parties.

### 10. ENTIRE AGREEMENT

- These terms and conditions are the entire agreement and the only representations and understandings between Seller and Buyer, and no addition, deletion or modification shall be binding on Seller unless expressly agreed to in writing and signed by an officer of Seller.
- Buyer is not relying upon any warranty or representation except for those specifically stated here.

### 11. APPLICABLE LAW

The contract and all performance and disputes arising out of or relating to goods involved will be governed by the laws of R.O.C. (Taiwan, Republic of China), without reference to the U.N. Convention on Contracts for the International Sale of Goods or to conflict of laws principles. Buyer agrees at its sole expense to comply with all applicable laws in connection with the purchase, use or sale of the goods provided hereunder and to indemnify Seller from any failure by Buyer to so comply. Without limiting the foregoing, Buyer certifies that no technical data or direct products thereof will be made available or re-exported, directly or indirectly, to any country to which such export or access is prohibited or restricted under R.O.C. laws or U.S. laws or regulations, unless prior authorization is obtained from the appropriate officials and agencies of the government as required under R.O.C. or U.S. laws or regulations.

### 12. JURISDICTION AND VENUE

The courts located in Hsinchu, Taiwan, Republic of China, will have the sole and exclusive jurisdiction and venue over any dispute arising out of or relating to the contract or any sale of goods hereunder. Buyer hereby consents to the jurisdiction of such courts.

### 13. ATTORNEYS' FEES

Reasonable attorneys' fees and costs will be awarded to the prevailing party in the event of litigation involving and/or relating to the enforcement or interpretation of the contract and/or any goods sold under it.