



core  
systems

# ACPI – Status and Opportunities

Discussion on the  
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# ACPI Status

- Autogeneration of RSDP and RSDT, FACS
- Semi-autogeneration of HPET (fixed address), SRAT (NUMA), MADT (APICs), SSDT
- Manual generation of FADT
- Templates available for DSDT (ASL code) on AMD-K8 and Via Epia-M



# ACPI Goals – Infrastructure

- Cleanup and separate tree in Config.lb
- IRQ routing information needs to be described in the config tree
- PCI slots need to be described in the tree configuration
- Modularize: Move AMD8111 specific code from mainboard to southbridge directory
- Add method of describing available interrupt controllers per component and in the component directories (IO APIC, local APIC)



# ACPI Goals – Data Structures

- LinuxBIOS table should contain a representation of the LinuxBIOS device tree. It is such a wonderful data structure – Let's share it!
- Enhance device tree by configuration file information (“static tree“): IRQ routing information, CPU information, hardware specific information (framebuffer address, DCON?)



# ACPI Goals - Generators

- With this information in place we could not only handle ACPI but generate some other tables (if we do not decide to drop those completely):
  - MP tables
  - PIRQ tables



# ACPI Opportunities

- EFI heavily relies on ACPI
- ACPI will not die in the next 15 years.
- Providing ACPI tables is a reason to clean up our internal data representation (which is far more important than ACPI itself)



# Discussion

