

ISO/IEC 29341-16-11:2011-08 (E)

Information technology - UPnP Device Architecture - Part 16-11: Low Power Device Control Protocol - Low Power Service

| Contents | Page |
|---|------|
| 1 Overview and Scope..... | 3 |
| 1.1 Referenced Specifications | 4 |
| 1.2 Notation | 4 |
| 1.3 Abbreviations | 5 |
| 1.4 Non-goals | 5 |
| 2 Service Modeling Definitions..... | 5 |
| 2.1 ServiceType | 5 |
| 2.2 State Variables..... | 5 |
| 2.2.1 Derived data Types..... | 5 |
| 2.2.2 BatteryLow | 6 |
| 2.2.3 ExternalPowerSupplySource | 7 |
| 2.2.4 WakeupMethod..... | 7 |
| 2.2.5 PowerSupplyStatus..... | 7 |
| 2.2.6 SleepPeriod..... | 7 |
| 2.2.7 PowerState | 8 |
| 2.2.8 Low power SSDP extensions..... | 8 |
| 2.3 Eventing and Moderation | 8 |
| 2.4 Generic LP-aware control point recommendations..... | 8 |
| 2.5 Actions..... | 9 |
| 2.5.1 GetPowerManagementInfo()..... | 9 |
| 2.5.2 Wakeup()..... | 10 |
| 2.5.3 GoToSleep() | 11 |
| 2.6 Theory of Operation..... | 11 |
| 2.6.1 Explanation of Actions and operations..... | 11 |
| 2.6.2 Low power state behavior | 12 |
| 3 XML Service Descriptions..... | 14 |
| 4 Test | 16 |
| 5 Sample Argument XML documents | 16 |
| 5.1 PowerSupplyStatus | 16 |
| 5.2 WakeUpMethod..... | 16 |
| Figure 1 — UPnP Low Power states..... | 13 |

| | |
|---|----|
| Table 1 — Low power states..... | 3 |
| Table 2 — Abbreviations..... | 5 |
| Table 3 — State Variables..... | 6 |
| Table 4 — SSDP power management extension headers..... | 8 |
| Table 5 — State variable eventing..... | 8 |
| Table 6 — Actions..... | 9 |
| Table 7 — Arguments for GetPowerManagementInfo()..... | 9 |
| Table 8 — Error Codes for GetPowerManagementInfo()..... | 10 |
| Table 9 — Error Codes for WakeUp()..... | 10 |
| Table 10 — Arguments for GoToSleep()..... | 11 |
| Table 11 — Error Codes for GoToSleep()..... | 11 |
| Table 12 — State machine Transition Description..... | 14 |