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