Supplementary Table 1. All variables used in this study, along with a brief explanation.

N_0:	Number of heat conducting fibers connected to the heat source
N_b:	Number of branches at the junction of heat conducting fibers
m:	Number of heat conducting fibers along each heat transfer path from heat source to sink
M:	Total number of heat conducting fibers in the network
c:	$1/N_b$
R:	Overall thermal resistance of the thermal management network
R_0:	Thermal resistance of each heat conducting fiber
R_c:	Interfacial thermal resistance at junctions between heat conducting fibers
$R_{c'}$:	Thermal resistance of the interfacial resistance, grouped together for each heat conducting fiber
R_{0e}:	Effective thermal resistance of heat conducting fibers after taking into account the interfacial resistance
λ_0:	$1/R_0$, thermal conductance of each heat conducting fiber
λ:	$1/R$, overall thermal conductance of the thermal management network
κ:	Intrinsic thermal conductivity of materials
D:	$D = \lambda/M$, thermal conductance density of the thermal management network
r:	Radial extent of the thermal management network for point-load heat source
θ:	Half the branch angle at fiber junctions in the hierarchical structure
l:	Length of the heat conducting fiber
d:	Diameter of the heat conducting fiber
A:	Cross section area of heat conducting fiber
T_h:	Temperature of the heat source
T_c:	Temperature of the heat sink
T_r:	Reduced temperature variable $(T - T_c)/(T_h - T_c)$
$T(x, t)$:	Temperature as a function of spatial coordinate x and time t
C_p:	Specific heat of the heat conducting fiber
ρ:	Density of the heat conducting fiber
x:	Spatial position variable in heat transfer equation
t:	Time variable in heat transfer equation
w:	Width of parallel non-hierarchical structures